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Tacit Knowledge in Military Leadership: Some Research Products and Their Applications to Leadership Development

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14. ABSTRACT *(Maximum 200 words)*:

Tacit knowledge is defined as knowledge grounded in experience, intimately related to action, and not well supported by formal training and doctrine. Tacit knowledge of leadership used by Army officers at three different levels of command have been identified, assessed, and developed into assessment inventories for each level. The inventories have been construct validated and proven to predict leadership effectiveness ratings at each level and to do so better than measures of verbal reasoning ability, tacit knowledge for business managers, or experience. This report summarizes the development process and identifies and discusses findings from the development process that have potential application in Army leadership development. The relationship of tacit knowledge to the future of military leadership is also discussed.

15. SUBJECT TERMS

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A primary mission of the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) is to enhance military readiness through programmatic research that supports the effective performance of Army leaders. To accomplish this, ARI and the United States Military Academy (USMA) established the Center for Army Leadership and Organizational Research (CLOR) at USMA to conduct research as part of ARI's research program in the areas of organizational leadership and leader development, education, and training. The research reported here is part of the ARI exploratory development research program formulated and undertaken by the CLOR.

This report is the fifth product of a project jointly undertaken by researchers at USMA and at Yale University. The overall objective of the project is to test the applicability of a theory of tacit knowledge to military leadership. Previous research had shown that tacit knowledge, acquired through practical on-the-job experiences, is related to executive and managerial effectiveness in civilian organizations.

The rigorous methodology used in identifying and assessing tacit leadership knowledge produced many insights regarding how best to apply the resulting measurement tools. This report delineates those application insights and takes a look at how they might interact with the future of leadership development in the United States Army.

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Technical Director

TACIT KNOWLEDGE FOR MILITARY LEADERSHIP: SOME RESEARCH PRODUCTS AND THEIR APPLICATIONS TO LEADERSHIP DEVELOPMENT

EXECUTIVE SUMMARY

Research Requirement:

    To support the development of tacit knowledge for military leadership by (a) identifying products and insights that have emerged from the study of tacit knowledge in military leadership, and (b) recommending potential applications of those products to the development of successful leaders.

Procedure:

    The research conducted to support the identification, assessment, and teaching of tacit knowledge for military leadership is reviewed. The accumulated findings from this research project were used to identify products to support the development of successful military leaders. These products and their potential applications to existing leadership-development activities are discussed. The role of tacit knowledge in future military leadership is considered.

Findings:

    Several products of the Tacit Knowledge for Military Leadership project are identified. These include the methodology for eliciting tacit knowledge, the leadership stories obtained from officer interviews, summaries of key developmental challenges at each level, the tacit knowledge inventories, expert response profiles, and perspectives of leader effectiveness from 360 degree ratings.   These products can be easily incorporated into existing and future efforts to develop Army leaders. The methodology can be applied to other aspects of military service or to extend the database of tacit knowledge obtained for military leadership. The key developmental challenges can assist officers in their role as mentors. The leadership stories can be used to construct case-based teaching materials, for use in and out of the classroom. Similarly, the data from experts and incumbents can be used through self-study or classroom learning to explore different responses to the tacit knowledge inventories and how these responses relate to leader effectiveness.

Utilization of Findings:

    The research products identified in this report support the development of effective military leaders. The importance of tacit knowledge to effective leadership is highlighted by the rapidly changing, increasingly complex operating environment in the Army. Under these conditions, it is difficult to educate leaders today for what they will face tomorrow. The challenge is to enable leaders to learn more effectively and efficiently from

their experiences. Supporting the acquisition of tacit knowledge is one way to meet the demand for continuous learning in a volatile and complex environment.

TACIT KNOWLEDGE FOR MILITARY LEADERSHIP: SOME RESEARCH PRODUCTS
AND THEIR APPLICATIONS TO LEADERSHIP DEVELOPMENT

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TACIT KNOWLEDGE FOR MILITARY LEADERSHIP: SOME RESEARCH PRODUCTS AND THEIR APPLICATIONS TO LEADERSHIP DEVELOPMENT

Introduction

The Tacit Knowledge for Military Leadership project is a collaborative research effort between the U.S. Army Research Institute, The U.S. Military Academy, and Yale University. This is the fifth report in a series of technical reports designed to document our long-term efforts to identify and assess tacit knowledge for military leadership effectiveness. Previous technical reports include a review of theoretical and empirical work on tacit knowledge relevant to military leadership development (Horvath, Williams, Forsythe, Sweeney, Sternberg, McNally, & Wattendorf, 1994a); the results of an interview study to elicit the tacit knowledge of Army officers (Horvath, Forsythe, Sweeney, McNally, Wattendorf, Williams, & Sternberg, 1994b); the process of selecting items for the development of tacit knowledge inventories (Horvath, Sternberg, Forsythe, Sweeney, Bullis, Williams, & Dennis, 1996); and the construct validation of the tacit knowledge inventories (Hedlund, Horvath, Forsythe, Snook, Williams, Bullis, Dennis, & Sternberg, in preparation). The purpose of the present report is to document various research products and insights accumulated over the course of this five-year project.

From the start, our research has been motivated by a fundamental desire to better understand leader development in the Army. According to doctrine (DA Pam 350-58), the Army has an integrated, progressive, and sequential program of leader development based on three pillars: 1) institutional training (formal schooling), 2) self-development, and 3) operational assignments. All three pillars are viewed as important to leadership development, yet relatively little is known about the role of operational assignments relative to institutional training. For example, institutional training receives substantial systematic assessment through the use of traditional end-of-course feedback instruments, annual curriculum reviews, and periodic school-wide studies. Self-development, while previously neglected by the institution, has also received increased emphasis lately. This left operational assignments, as a vehicle for development, largely understudied.

While most practitioners tell us that Army leaders learn about leading while doing real work in the motor pool, in the field, and in the barracks, few studies have attempted to systematically explore how this actually happens -- how Army leaders develop "as leaders" while on the job. Not surprisingly, the Army's primary emphasis for soldiers serving in operational assignments is on mission accomplishment; leader development, while central to accomplishing the mission, is viewed largely as a beneficial by-product of accomplishing the real work of the Army. Based on this assessment, we searched the literature for a theoretical vehicle to help us understand how leaders learn about

leading while on the job. Once again, we discovered that very few studies have focused on what leaders know about leading -- even less about how they develop such knowledge while on the job. This search led us to Robert Sternberg's work on practical intelligence and tacit knowledge.

We discovered in Sternberg's work a framework for studying leader development through on-the-job experiences. His previous research with managers and teachers offered a conceptual starting point and a methodology for exploring the third pillar of leader development. We hoped to identify what Army leaders learn about leadership through experiences in their units, with the goal of informing leader development doctrine as well as officer education and training.

The focus of our research has been on the tacit knowledge that Army officers acquire from leadership experience. Tacit knowledge may be defined as work-related knowledge that is action-oriented, practically relevant, and acquired on one's own. Experience-based knowledge of this kind tends to have an implicit or "behind the scenes" quality (hence the term "tacit") that makes it difficult to identify and leverage effectively in organizational settings. We believe that these "lessons from experience" are critical to successful military leadership.

Accordingly, the goals of the Tacit Knowledge for Military Leadership project have been to identify, validate, and recommend methods for developing the tacit knowledge of U.S. Army officers. Specifically, the project has explored tacit knowledge pertaining to leadership at the platoon, company, and battalion levels with the understanding that leaders face different developmental challenges at different levels in the military. Our early work focused on testing the following three propositions:

- Tacit knowledge for military leadership exists within the U.S. Army

- Tacit knowledge for military leadership can be reliably and validly measured, and

- Possession of tacit knowledge for military leadership can be shown to make a difference in the effectiveness of Army leaders.

As the summary of research findings below will show, we have obtained empirical support for these three propositions. That is, we have shown that Army officers acquire knowledge that satisfies theoretically grounded criteria of "tacitness;" that tacit knowledge can be reliably and validly measured; and that these measures are significant and unconfounded predictors of leadership effectiveness. Having established that tacit knowledge is both real and consequential within the Army, we now consider the body of research products and insights that we have

produced in terms of their potential application. Specifically, we address how these products and insights may be used by those charged with developing leaders and promoting continuous learning within the Army.

Overview

In what follows, we offer a brief summary of our findings to date, organized around the three propositions that have been the focus of our earlier work (as indicated above). We then turn to a discussion of tangible products that have emerged from the project. As we emphasize, these are products whose potential value with respect to leader development has been supported by our research. In addition to enumerating and briefly explaining these products, we offer some suggestions about how they might be used in the Army's current leader-development programs. In the final section, we adopt a more forward-thinking perspective and offer a brief characterization of the future operating environment of the U.S. Army officer--a characterization grounded in Force XXI and "Army After Next" concepts. We then discuss some implications of our research on tacit knowledge for a model of leader development that moves us forward into the future.

Summary of Methods and Findings

In this section we offer a brief summary of the methods and findings from the Tacit Knowledge for Military Leadership project. The purpose of this summary is to provide the foundation for our later discussion of research products and their potential applications. More detailed accounts of our prior research can be found in the following sources (Horvath et al., 1994a; Horvath et al., 1994b; Horvath et al., 1996; Hedlund et al., in preparation).

What is Tacit Knowledge?

Tacit knowledge is most commonly defined as knowledge that resists introspection and articulation. That is, it is defined as knowledge that people do not know they have and/or find difficult to articulate. As its currency has increased, the term "tacit knowledge" has devolved into something of an *ad hoc* category, with quite different kinds of knowledge being lumped together. To better understand the senses in which the term is used, it is helpful to consider several reasons why useful knowledge might remain tacit or unspoken.

Pattern irreducibility.

Some knowledge concerns information patterns that cannot be reduced to rules or generalizations. For example, certain battlefield configurations may signal to the commander an opportunity but such configurations may be easier to recognize than to define concisely.

Context dependence.

Some knowledge is highly dependent upon the context in which it was acquired. For example, lessons from a peace-keeping mission in Bosnia may not be the same as training for war in the Middle East. Similarly, directive leadership may be an effective way of influencing subordinates in chaotic, urgent situations (e.g., combat), but it may not be effective in less meaningful assignments (e.g. raking leaves).

Routinization.

Some knowledge (particularly knowledge of action sequences) can become compiled into routines or procedures that "run" without conscious attention. For example, the coordination of hand and foot-driven controls becomes "second nature" to experienced vehicle operators. Some training efforts like "battle drills" are aimed at developing knowledge through routinization.

Distribution.

Some knowledge is distributed among individuals as a consequence of the division of labor such that no one person possesses the total knowledge of the group. Unless a concerted effort is made to capture and codify the knowledge of the group, it will remain tacit.

With respect to the "varieties" of tacit knowledge described in the wider literature, our operational definition tended to capture knowledge that was tacit for reasons of pattern irreducibility, context-dependence, routinization, and (to a lesser extent) distribution.

Characteristic features of tacit knowledge.

The operational definition of tacit knowledge that guided our research focused less on why knowledge remains tacit than on how tacit knowledge can be distinguished from more explicit, formal knowledge. This emphasis was necessary, given our desire to capture the leadership-related tacit knowledge of Army officers for purposes of measurement and validation. For these purposes, we defined tacit knowledge as that which is...

- Grounded in personal experience
- Intimately related to action
- Not well supported by formal training and doctrine

The criterion of being "grounded in personal experience" was intended to distinguish tacit knowledge from second-hand knowledge or "received wisdom." We restricted our study to knowledge based (as best we could determine) on first-hand experience or on vicarious experience through direct observation.

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The criterion of being "intimately related to action" was intended to distinguish tacit knowledge from "inert" knowledge. We restricted our study to knowledge that is instrumental (as best we could determine) to the attainment of goals that Army leaders care about. Finally, the criterion of being "not well supported by formal training and doctrine" was intended to distinguish tacit knowledge from knowledge that is explicitly taught or espoused. We restricted our study to knowledge that (as best we could determine) has to be acquired in the absence of support--knowledge that an officer might or might not acquire.

In addition, our study was limited to knowledge that pertained to leadership per se (i.e., rather than tactical or technical aspects of job incumbency). Thus, we classified as tacit knowledge for military leadership only that knowledge which pertained to the influence of others toward the attainment of the organization's legitimate goals.

Explanatory model of tacit knowledge.

To support the featural model of tacit knowledge outlined above, we developed a simple cognitive model to show that knowledge satisfying our three criteria should tend to confer a performance advantage on those who possess it (relative to more explicit, formalized knowledge). A brief summary of this model, presented in Figure 1, is provided here (for a more thorough discussion see Horvath et al., 1996). The model presents alternate pathways to knowledge acquisition. A basic distinction is made between two memory stores: episodic, memory for specific, personally experienced events; and semantic, memory for general, impersonal knowledge. Knowledge is acquired through personal experience or it is received directly. The latter, which is characteristic of formal instruction, is represented by Path B. Knowledge is "pre-processed" for the learner and can be directly encoded into semantic memory. Path A represents knowledge that the learner has processed on his or her own--through the translation of personal experiences into generalized knowledge structures. A third path, Path A', indicates that memory of personally experienced events can directly influence behavior without being processed into generalized knowledge. This is typically knowledge that is not readily articulated Based on this model, tacit knowledge can be characterized as knowledge that is acquired through Paths A or A', which can be contrasted with more formal, explicit knowledge acquired through Path B.
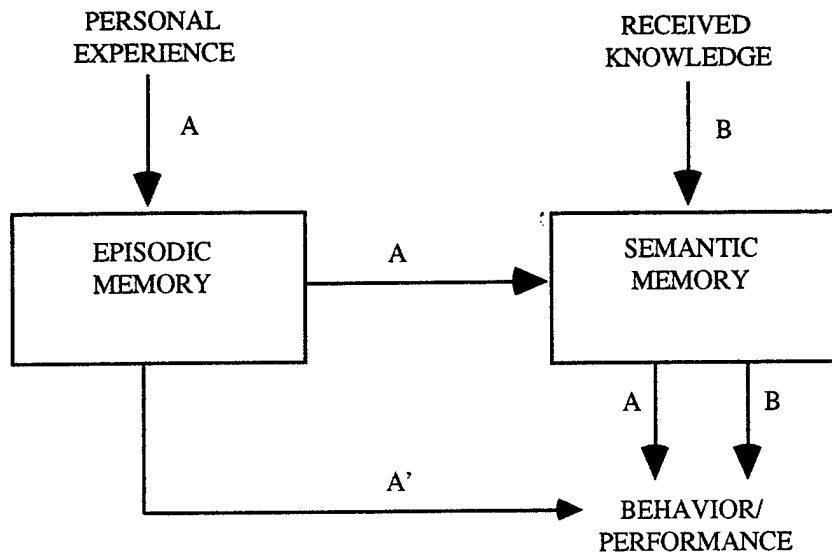
Figure 1. Memory structures and knowledge-acquisition pathways in an explanatory model of tacit knowledge

Knowledge acquired through Path A or A' is argued to be advantageous to performance in complex, contextualized problem situations. Knowledge acquired from experience, either through Path A or A', can be more readily brought to bear on performance. Further, since the generalized knowledge acquired via Path A is based on realistic, contextualized situations, it should have a higher probability of being applicable in future situations in comparison to knowledge acquired via Path B. Therefore, the more realistic and contextualized the situation, the more likely tacit, experience-based knowledge will contribute to effective performance.

The measurement of tacit knowledge involves tapping the possession of underlying knowledge gained from experience, identified as Paths A and A' in the model. Tacit knowledge tests are viewed as both exemplars of the underlying knowledge and as predictors of performance. That is, tacit knowledge tests are designed to tap the possession of experience-based knowledge stored in episodic or semantic memory, as well as provide an indication of those who are likely to succeed in complex, contextualized situations.

How is Tacit Knowledge Measured?

The measurement approaches that we have developed during the course of our research are perhaps best described by analogy to a production process. That is, we extracted "raw materials" in the

form of stories and insights obtained from Army officers during interviews. We processed these materials in order to refine them, using analysis and further data collection to narrow down and polish our sample of officers' tacit knowledge. We then used these refined materials to construct a line of "products" (i.e., inventories for measuring the tacit knowledge of Army officers). Finally, we tested our products against "industry" performance standards--standards for the reliability and validity of psychological tests. Figure 2 shows, in schematic form, the steps involved in the production of tacit-knowledge inventories. The boxes in Figure 2 represent major phases of the research project and the arrows represent important intermediate products from each phase.

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┌─────────────────────┐        Summaries          ┌─────────────────────┐
│     Interviews      │ ──→    & transcripts  ──┐  │     Selection       │
│                     │                         │  │     of TK items     │
│  Identification of  │                         │  │                     │
│   tacit content     │                         │  │    Construction     │
│                     │        Category         │  │  of preliminary     │
│      Sorting        │ ──→    framework    ──┐ │  │    inventories      │
└─────────────────────┘                       │ │  │                     │
┌─────────────────────┐                       │ │  │      Expert         │
│      Survey         │                       │ │  │     feedback        │
│  development and    │                       │ │  │                     │
│  administration     │                       │ │  │    Revision of      │
│                     │        Item           │ │  │    inventories      │
│   Analysis of       │ ──→    statistics  ───┘ │  │                     │
│   survey data       │                         │  └─────────────────────┘
└─────────────────────┘                         │
                                                    ┌─────────────────────┐
                                                    │  Tacit Knowledge    │
                                                    │  Inventories for    │
    TK Inventory for Managers       ┐               │  Military Leaders   │
                                    │               │                     │
    Leadership Effectiveness        │               │   Development &     │
    Survey                          ├──→            │   administration    │
                                    │               │   of test batteries │
    Concept Mastery                 ┘               │                     │
    Test                                            │    Analysis of      │
                                                    │   validation data   │
                                                    └─────────────────────┘
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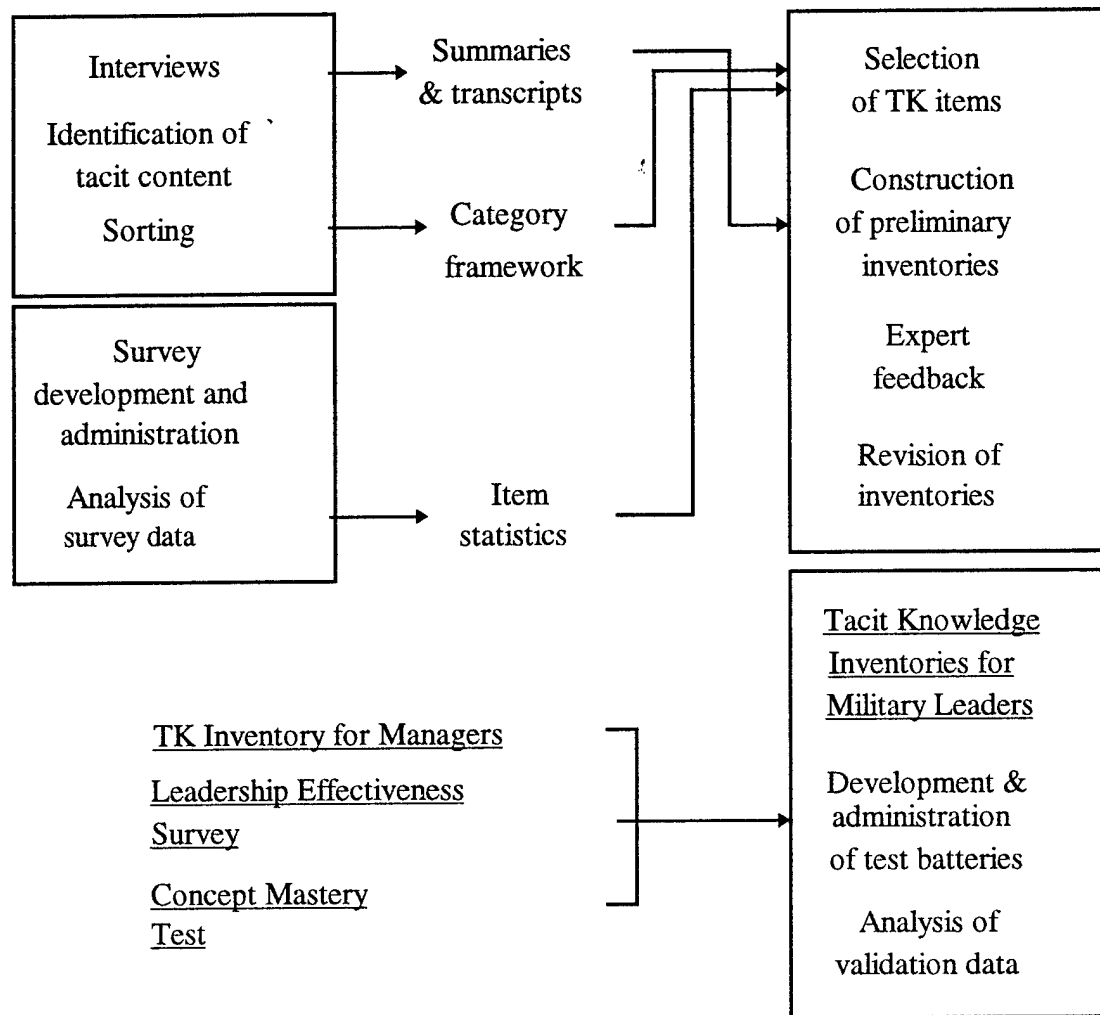
Figure 2. Phases of the tacit knowledge for military leadership project

In the first phase of the research project, we conducted a series of interviews to elicit the experience-based tacit knowledge of Army officers. We employed a semi-structured interview format in which Army officers were asked to "tell a story" about a personal experience from which they learned something important about leadership at their current level. Interviewers and interviewees worked together to clarify and capture the important features of these experiences. From the transcripts of these interviews we compiled a set of story summaries which formed the basis for further analysis and refinement.

We then asked a panel of military experts to reach consensus on the inclusion/exclusion of knowledge content according to our four criteria. That is, knowledge was included that was determined to be grounded in personal experience, intimately related to action, not well supported by formal training or doctrine, and pertained to leadership. Once the sample of tacit knowledge had been narrowed in this way, we asked members of the expert panel to sort the remaining knowledge items into categories of their own devising. By aggregating and cluster analyzing the sort data, we derived content-based categories of tacit knowledge at the platoon, company, and battalion levels. As we discuss in a later section of this report, the categorical framework that resulted from these analyses provided early insight into developmental challenges, unique to each level, that serve as stimuli for tacit knowledge acquisition. This framework also served as an important source of input to the inventory-development process.

In the next phase of the research, we further narrowed and refined our sample of officer tacit knowledge. Specifically, we identified those items that best embodied the tacit-knowledge construct and, thus, were most promising for purposes of inventory development. We conducted a large-scale survey study in which we asked Army officers to rate the tacit-knowledge items on a number of dimensions and used discriminant analysis to identify those items that best discriminated between experienced and novice officers at each level. Designation as experienced or novice was based on officers' enrollment status in U.S. Army Training and Doctrine Command (TRADOC) and their previous experience. For example, an officer enrolled in the Officer's Basic Courses who had not yet led a platoon, was designated as a novice platoon leader. Items with the most discriminating power were, by virtue of their demonstrated relationship to "experience," judged to be the most promising for purposes of instrument development.

The goal of the next phase was inventory development. We compiled our refined set of tacit-knowledge items into a test that could be administered to Army officers and used to assess the relationship between measured tacit knowledge and measured effectiveness. We used item statistics to select tacit-knowledge items that were (individually) construct relevant and we used the category framework to select sets of items that were (collectively) construct representative. Finally, we used the original summaries and transcripts to expand each of the selected tacit-knowledge items into a scenario that posed a leadership problem, along with a set of 10 to 20 response options for each scenario, which subjects rated for their quality. An example question from the company-level inventory is shown in Figure 3 below.

1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Extremely Bad		Somewhat Bad		Neither Bad Nor Good		Somewhat Good		Extremely Good

You are a company commander, and your battalion commander is the type of person who seems always to "shoot the messenger"--he does not like to be surprised by bad news, and he tends to take his anger out on the person who brought him the bad news. You want to build a positive, professional relationship with your battalion commander. What should you do?

_____ Speak to your battalion commander about his behavior and share your perception of it.

_____ Attempt to keep the battalion commander "over-informed" by telling him what is occurring in your unit on a regular basis (e.g., daily or every other day).

_____ Speak to the sergeant major and see if she/he is willing to try to influence the battalion commander.

_____ Keep the battalion commander informed only on important issues, but don't bring up issues you don't have to discuss with him.

_____ When you bring a problem to your battalion commander, bring a solution at the same time.

_____ Disregard the battalion commander's behavior: Continue to bring him news as you normally would.

_____ Tell your battalion commander all of the good news you can, but try to shield him from hearing the bad news.

_____ Tell the battalion commander as little as possible; deal with problems on your own if at all possible.

Figure 3. Sample question from the Tacit Knowledge Inventory for Military Leaders

Once preliminary inventories were constructed for each of the three levels under study, we further refined and construct validated the inventories using focus groups composed of recent job incumbents. We explained to these officers the goals of our research and the nature of tacit knowledge as we defined it in

our study. We then asked them to judge the "fit" of our inventory questions to the tacit-knowledge construct as well as to offer suggestions for the refinement of the inventories. We then revised the inventories to accommodate the judgments and suggestions of the focus group members. The resulting <u>Tacit Knowledge Inventories for Military Leaders</u> were then reproduced for further validation.

Unlike questions on achievement or intelligence tests, questions on a tacit knowledge test do not have objectively "correct" answers. As the sample question in Figure 3 makes clear, much depends upon how the subject interprets the problem described in each scenario. Nonetheless, because these interpretations draw upon knowledge gained from experience, it is assumed that better and poorer response patterns may be established and that the appropriate standard for response quality is that provided by a group of highly experienced practitioners.

In our study of officer tacit knowledge, the expert groups were composed as follows. Students at the Army War College (AWC) served as an expert group for the battalion-level inventory. AWC students are lieutenant colonels and colonels who were selected to attend this school based primarily on their demonstrated excellence as battalion commanders. This is a very select group of officers. Majors and lieutenant colonels attending the Pre-Command Course served as an expert group for the company-level inventory. This is also a very select group of officers who, based primarily on their success as company commanders, have been chosen to command battalions. Selection for battalion command is an extremely competitive process. Finally, captains selected "below the zone" for major and attending the Command and General Staff College (CGSC) served as an expert group for the platoon-level inventory--a very select group based on their performance at the platoon and company level. By virtue of their experience and accomplishments at the levels in question, these three groups of officers were deemed to represent the experienced and successful practitiones based on the Army's classic hierarchical promotion system. Accordingly, other subjects' performance on the <u>Tacit Knowledge Inventory for Military Leaders</u> were scored relative to the expert group for his or her current level in the chain-of-command. The greater the agreement or proximity between a subject's responses and those of the expert group, the higher that subjects' score on the inventory.[1]

<u>What is the Relationship between Tacit Knowledge and Leadership Effectiveness?</u>

Having established that tacit knowledge for military leadership exists within the U.S. Army officer corps, and having

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[1]   A more detailed account of the process by which tacit knowledge inventories were scored may be found in Hedlund et al. (in preparation).

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developed instruments to measure that tacit knowledge, we proceeded to test the proposition that tacit knowledge makes a difference in the effectiveness of Army leaders. This prediction follows directly from the cognitive model upon which we based our construct definition and inventory development. It also follows from a body of prior research on the nature and role of tacit knowledge in the workplace. And it is critical to assessing the practical import of tacit knowledge for improving processes of leader development and organizational learning within the Army.

To test the proposition that tacit knowledge makes a difference, we administered our inventories to a sample of active-duty officers from around the continental United States. We correlated their scores on the inventories (i.e., their degree of tacit knowledge) with an independently-obtained measure of their effectiveness as leaders. To the extent that these correlation's are significant and positive--provided that alternative explanations can be ruled out--it can be argued that tacit knowledge makes a difference in Army leadership.

We administered a test battery composed of the <u>Tacit Knowledge Inventories for Military Leaders</u> and several other measures to the officer chains-of-command in 44 battalions. To assess effectiveness, we included in our test battery the <u>Leadership Effectiveness Survey</u> which asked each officer in the battalion to rate his or her direct superior, direct subordinates, and peers in the battalion. In this way, we obtained a 360-degree profile of the leadership effectiveness of the subjects who completed our <u>Tacit Knowledge Inventories for Military Leaders</u>.

In order to rule out a possible, alternative explanation of our results (i.e., that subjects' verbal ability, rather than their tacit knowledge, was driving our results) we administered a brief test of verbal ability, the <u>Concept Mastery Test</u>. By measuring subjects' verbal ability, we were able to factor it out of subsequent analyses so that the correlation between tacit knowledge and effectiveness could be assessed more directly. In addition, we administered a prior validated instrument, the <u>Tacit Knowledge Inventory for Managers</u>, in order to assess the overlap between tacit knowledge for military leadership and tacit knowledge for civilian management. Finally, we asked subjects for information about their branch of service and time in their current job.

The results of our construct validation confirmed that tacit knowledge for military leadership does make a difference in terms of leadership effectiveness. At all three organizational levels, we found that tacit knowledge for military leadership could be reliably measured and that it could predict leadership effectiveness. In particular, we found that tacit knowledge related to how leaders were viewed by their superiors at the platoon, company, and battalion levels. This is consistent with a classical hierarchical promotion system whose definition of

success is largely based on how one is perceived by his or her superior. Tacit knowledge was also important to subordinate and peer perceptions of effectiveness at the company level, which is consistent with the diverse role requirements of company commanders. For all instances in which the <u>Tacit Knowledge Inventory for Military Leaders</u> predicted leadership effectiveness, it did so above and beyond measures of verbal reasoning ability and tacit knowledge for managers. Therefore, we established the validity of tacit knowledge for military leadership as an important variable and one more relevant to understanding leadership effectiveness than traditional measures, and in the process identified several meaningful patterns of relationships across organizational levels.

Products and Insights

We now turn to a discussion of tangible products that have issued from the Tacit Knowledge for Military Leadership project. As the preceding discussion has shown, the tacit knowledge which these products embody and reflect bear a significant relationship to the effectiveness of Army leaders. This finding increases our confidence that the products may be profitably incorporated into leadership development and organizational learning initiatives. In this section, we enumerate the tangible products of our research and remark briefly upon their potential application. Where relevant, we incorporate sample products as appendices to this report. Sources for these materials can be obtained through the Center for Leadership and Organization Research, U.S. Military Academy.

<u>Products</u>

<u>Methodology for elicitation of tacit knowledge.</u>

One important product of our research has been a set of techniques for uncovering, through semi-structured interviews, the practical knowledge that Army officers acquire from experience—knowledge that tends to go unexpressed under ordinary circumstances. Given the current interest in capturing and "leveraging" the hidden knowledge assets within organizations, such a methodology should prove useful in a variety of settings and for a variety of purposes. The description of our methodology (attached as Appendix A) specifies the composition of interview teams, the introductory briefing of subjects, and a set of questions and guidelines for getting at the tacit knowledge embedded in professionals' experience.

<u>Leadership stories.</u>

Tacit knowledge is embedded in experience and people tend to organize their personal experiences in the form of stories or narratives. The leadership stories which we "mined" for tacit knowledge are, themselves, rich sources of insight into the lives and work of Army officers. Our leadership stories have the

further benefit of being broadly-based, recently acquired, and carefully selected for their "tacit" content. They are also structured in terms of multiple, empirically-based categorization schemes and so should lend themselves to flexible indexing in an on-line environment. Examples of leadership stories at each level of analysis are included in Appendix B. Each sample story is linked to an item of tacit knowledge that was encoded from that story.[2] An on-line database would enable the user to read cases and then access the advice that was extracted from the story. Category labels and keywords offer ways to compile and index these rich leadership stories and the associated tacit knowledge items in such a database.

Characterization of developmental challenges.

The tacit knowledge that emerged from the officer interviews--filtered through the organizing framework provided by our expert judges--tell a story about the developmental challenges that Army officers face as they ascend the chain of command. We do not refer here to the individual leadership stories described above, but rather to the "meta-story" that emerges from these individual stories. In the second year of the Tacit Knowledge for Military Leadership project, we devoted considerable attention to exploring these issues at each of the three levels we studied. The key developmental challenges at each organizational level are summarized in Table 1 and a more thorough discussion of the developmental milestones is provided as Appendix C.

Table 1.

Key Developmental Challenges at Each Organizational Level

Platoon	Company	Battalion
Motivating subordinates	Direct versus institutional leadership	Protecting the organization
Establishing credibility	Directing and supervising others	Managing organizational change
Managing the self	Cooperating with others	Indirect communication and influence
	Balancing mission requirements and subordinate needs	Dealing with poor performers

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[2] Sample leadership stories, coded tacit knowledge items, and tacit knowledge inventory questions are used to demonstrate the products and their applications. Examples were selected for which their was complete information in the form of a matching story, item, and question, and for their ease of presentation.

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Tacit knowledge inventories.

A third set of products issuing from the project are, of course, the items that comprise the Tacit Knowledge Inventories for Military Leaders. Like the leadership stories upon which they are based, the inventory items represent potentially rich sources of insight into the practical knowledge that guides action. Because each item includes both a scenario and a series of response options, the inventories offer a more structured basis for teaching, group discussion, or self-directed learning. Like the leadership stories, the inventory items have been selected for their tacit content and can be categorized to permit flexible indexing. Sample questions from tacit knowledge inventories at the battalion, company, and platoon levels are attached as Appendix D. For each question, a link is shown to the associated leadership stories and tacit knowledge items. A user could complete the tacit knowledge question and then refer to an associated story or item to learn more about the response options and the context from which they were taken. Again, content categories, like the ones provided in the examples, could be used to organize all the related information into an on-line database.

Expert response patterns to inventory questions.

From our construct validation effort, we also have normative information for each inventory question and its associated response options in the form of expert group ratings. The response patterns of experts can be used to guide group discussion about the appropriate responses to various situations, or to compare one's own responses to the experts. Examples of expert response profiles for a sample question at each of the three levels are provided in Appendix E. This information summarizes the ratings given by experts to each response option, allowing the user to see the strength (i.e., how good or bad is the response option considered) and variability of experts responses (i.e., how much do the experts agree in their ratings).

Perspectives from the 360° rating instrument.

Finally, the construct validation of the Tacit Knowledge Inventories for Military Leaders produced a body of evidence concerning the perspectives of Army officers at different levels within the chain-of-command. Specifically, the combination of inventory scores and 360° effectiveness data yielded a variety of insights into the very different ways in which subordinates, peers, and superiors interpret situations and evaluate courses of action. Indeed, the relationship between endorsing particular response options and being rated as effective often depended entirely on whether subordinates, peers, or superiors were doing the rating. In short, data drawn from the 360° rating instrument make it clear that there are no "right" answers to many leadership dilemmas and that the varying perspectives of

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other leaders need to be considered in fashioning a workable plan. Through the exploration of these data, the differing perspectives of platoon leaders, company commanders, and battalion commanders can be more readily understood. One way to explore these data is to compare the responses of leaders who were rated low with those rated high across the different perspectives. Examples of inventory responses for those rated high and low on effectiveness at each level of analysis are shown in Appendix F. This information is provided for each of the three rating dimensions (overall, interpersonal, and task) and each perspective obtained (e.g., peers, superior). These data can be explored to learn what expectations others have about the tacit knowledge that is important for effective leadership.

Potential Applications

We believe that the research products enumerated above could be profitably incorporated into a variety of leader-development activities within the U.S. Army. In this section we remark upon some of the most direct and productive of these applications.

Identifying tacit knowledge in new domains and settings within the Army.

The methodology that we developed for eliciting and codifying tacit knowledge could find ready application in Army domains other than leadership *per se*. Although so-called "soft skills" such as leadership have an undeniably tacit component, there is ample reason to believe that more technical or tactical aspects of job incumbency within the Army also draw on tacit knowledge. Further, our methodology could be applied toward the goal of obtaining a more extensive and diverse sample of leadership tacit knowledge. The methodology that we developed is quite generalizable in these respects.

Supporting commanders in their role as "mentors."

Commanders can benefit from a knowledge of the "hidden" developmental hurdles that the officers whom they mentor[3] are facing. Armed with foreknowledge, mentors can create opportunities for experience-based learning around level-specific developmental challenges. Whether learning opportunities are created or simply encountered, mentors can help to orient junior officers to the developmental themes that underlie the challenging situations they currently face. Mentors can also coach junior leaders through these challenges, drawing on their own experience as well as upon supporting materials such as those described in the sections above.

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[3] The term mentor is used to refer to the variety of roles assumed by more experienced officers in developing less experienced officers. A mentor can function as a coach, teacher, counselor, or instructor, and the mentoring role can be assigned or entered into voluntarily.

Development of materials for case-based learning.

Our research suggests that tacit knowledge is embedded in situations and stories--it is case-based knowledge. Case-based teaching is a powerful and proven way of teaching professionals. As described above, the Tacit Knowledge for Military Leadership project has produced a wealth of leadership stories, inventory items, and associated response data that could be used to construct case-based teaching materials. Ideally, such materials would be organized as a network of on-line, hyperdocuments-- accessible by anyone within the Army. Endowed with browsing, search, and authoring functions, such on-line material could support both structured and self-directed exploration.

We envision an application with these basic properties being used to support leader development under all three "pillars" of the current Army leader development model. For example, commanders and the junior leaders whom they mentor could explore together those leadership cases that address issues relevant to the junior leader. In the TRADOC schools, instructors could create trajectories, annotations, and hyper-links to related material on-line in order to structure their students' exploration of the case library. Finally, in self-study, officers could search for and examine cases that illuminate the problems they face on the job--reflecting on how experts would solve a given problem as well as on how the "expert" solution might be viewed by various stakeholders. We believe that the combination of leadership stories, inventory items, normative response data, and 360° effectiveness data can, if properly deployed, advance the "state of the art" in case-based learning-- bringing the same content to bear on classroom learning, learning from job experience, and self-study.

Rethinking the role and scope of classroom learning.

The delivery of knowledge can be achieved by either "push" or "pull." In push delivery, a knowledge source (e.g., teacher) delivers information and learning activities in a structured form to a knowledge recipient (e.g., a student). Knowledge is pushed from source to recipient. In pull delivery, a knowledge recipient draws on information resources in the environment as he or she experiences a need for that knowledge. Knowledge is pulled out of a source by a recipient. Traditional, classroom-based teaching has relied on push delivery in order to ensure the quality and completeness of learning outcomes.

However, when enriched case-libraries such as the ones we envision are available "just in time" (i.e., on demand via client-server networks), then it becomes possible for knowledge delivery to be achieved through "pull" by the end user without diluting learning outcomes. Consider, for example, the lieutenant who dials into an on-line case library and follows pre-established links through a set of annotated cases. There,

she finds leadership scenarios organized according to several categorization schemes. Selecting one that addresses a challenge she currently faces, she is able to reflect on different response options as well as consider the viewpoints of various stakeholders. She views annotations made by others and perhaps adds her own annotations. Clearly, this lieutenant is doing more than passively reading. Rather, she is actively engaged in a structured learning experience--one that closely mirrors her current knowledge needs. Further, she is connected, asynchronously, to a community of practitioners. This community is essentially an enlarged version of the community or "network" the lieutenant draws on during the course of her day-to-day activities.

We can identify two important benefits of developing enriched case-libraries grounded in a sample of validated tacit knowledge. First, the pedagogical impact of classroom learning may be achieved (or approached) via distance learning. That is, "lessons learned" can be conveyed remotely and flexibly. Second, the distinction between learning and doing--between "training" and "decision support"--is blurred. Leaders draw on knowledge resources as they go about their jobs and contribute to these resources as community members when they learn something of value. In short, learning and doing become more tightly linked, with responsibility for management of the learning process devolving to the individual learner. This is a theme we explore further in the final section.

Implications for the Future

The preceding discussion of research products and their potential uses has been predicated upon a model of leader development--the "three pillars"--that has guided the Army for many years. Yet perhaps the most important implication of work on tacit knowledge (ours and that of others) has been to call certain elements of that learning model into question. In the final section of this report, we examine the future operating environment of the U.S. Army and, working from some straightforward projections, propose a new way of thinking about leader development. The key to this new way of thinking is to acknowledge the essentially situated nature of all leadership learning. Such a recognition implies shifting the emphasis from school-based learning to informing and supporting the leader in his or her day-to-day activities.

The Future Operating Environment

Considerable effort has gone into characterizing the Army's future "way of war." One need, of course, has been to understand the ways in which the requirements of effective leadership might change. Although this sensemaking effort is on-going within the Army, some generally agreed upon themes have emerged from recent reports in TRADOC's "Army After Next" initiative.

It has become clear that the Army of the future will be engaged around the world and will be faced with a diversity of mission-types and settings. It is likewise clear that advances in information technology will increase the volume of information to which commanders must attend while, at the same time, compressing the periods of time during which they may consider it. In general, we may say that commanders will be faced with situations that are increasingly ambiguous, complex, and volatile. Internally, the Army will continue to grow in diversity and, given the explosion of information and the compression of time, responsibility for decision making will continue to devolve to lower organizational levels. As in the civilian world, ad hoc organizational forms will proliferate. More work will be assigned to dynamically assembled task forces and more of a commander's time will be spent working collaboratively.

The implications of this changing environment for leadership development are profound. In a stable, predictable environment, traditional mechanisms of knowledge transfer are sufficient. In a rapidly changing, increasingly complex environment, however, it becomes difficult to educate leaders today for what they may face tomorrow. The challenge, therefore, is to enable Army leaders to learn more effectively and rapidly from their experience and to provide them with the information resources they need to make sound decisions rapidly.

Implications of Tacit Knowledge in Future Leader Development

In order to address some of the challenges that lie ahead, the Army needs a new way of thinking about leadership development, one that explicitly recognizes the quickening pace of environmental change. By necessity, current Army leaders are already struggling with this challenge as they attempt to adapt to the changing world around them. Out of these struggles emerge insights into new ways of thinking about old ways of developing leaders.

An unanticipated product of the Tacit Knowledge for Military Leadership project emerged from our numerous trips to the field to administer surveys. Inevitably, when we introduced the topic of our project to senior leaders in the field, sitting battalion and brigade commanders would share their insights about leader development. These insights were often highly informative about the challenges faced by the Army to develop effective leaders in a rapidly changing environment. After completing the Leadership Effectiveness Survey, one particularly thoughtful brigade commander handed a member of the research team his completed instrument and asked, "So you want to know about developing leaders?" Below are his thoughts on the challenges of developing leaders in such a fluid operating environment:

> You know what my real job is? Yeah, yeah, I'm a warrior; I command an infantry brigade--but you know

what I spend most of my time doing? Teaching. Absolutely. I am a teacher. After my first few months in command, after I had things running the way I wanted, I realized that the most valuable use of my time was spent teaching junior officers--sharing with them the lesson I had learned along the way... They tell me what they're experiencing and then together we discuss what to do. There's a lot of story-telling going on here... Out of their current frustrations and my experience we solve problems; we move forward... or sometimes, I just start with something important I've just experienced and we talk about it for awhile.

Don't tell anyone this, but if the Army really wants to get the most out of its brigade commanders, they would come up with a systematic plan to rotate us back to the schoolhouses a couple of days a month. I remember a sitting brigade commander coming to Benning straight out of the field; he gave a short talk on command; we had dinner and then for the rest of the night, he gave it to us straight--all the lessons he had just learned, all the things that he had wished someone would have told him right before he took command. You can't learn that stuff from books, ya know; you gotta live it, and ya know, it just changes too damn fast. The stuff he told me--the stories--they were fresh; it had to do with current hot political issues in the field--which way the wind was blowing on everything from soldier comp time to how to handle "don't ask; don't tell." I had a leg up when I got here.

But you know, the lessons he told me a few months ago aren't even relevant any more. That's how fast things are changing. There's no time any more to write this stuff up into doctrine; publish it, and then teach it in TRADOC classrooms. By the time it gets into a syllabus at CGSC or the War College, it's old news; the rules have changed, or something has taken its place. Now I'm not saying we need to do away with formal career schools altogether. Some stuff changes more slowly and that's what we should learn in school. But the day-to-day stuff, the really important stuff... I guess what I am saying is things are changing so fast out here that the Army needs to be smarter about helping us share our lessons real time, right now. I do it everyday in my brigade; but I'm not sure it's happening everywhere...

I could almost imagine a review of all TRADOC schools with an eye towards removing those fast-changing topics about leadership and command from their classrooms and moving them out to the field. From the resources we save in the schoolhouses, we could stand up local "learning-centers" at division or post-level. These

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could be central clearing houses with the mission to encourage and facilitate the sharing of lessons learned from real experience, real-time--maybe using an interactive web site or something. I don't know; I'm just a dumb grunt; but the opportunities are endless. I just know that we have to do a better job of learning from our experiences, faster, and better than we have in the past. If you can take that back from your study, you will have really done something, at least in my book.

Other leaders echoed many of the insights found in this single rich account. While anecdotal, such stories not only reinforce our findings that tacit knowledge for military leadership exists, but they also suggest that such experience-based insights may become an increasingly important component of the leader development process. Our findings suggest that action-oriented, experience-based, practically relevant knowledge is more important than ever in operational environments characterized by volatility and change. As the pace of change in the military quickens and learning cycles continue to shrink, the boundaries between the Army's three pillars of leader development begin to blur. The **schoolhouse** moves toward the field as mission accomplishment and **personal development** demand continuous learning in **operational assignments**. Many of the Tacit Knowledge for Military Leadership research products and insights outlined in this report support this general shift in the locus of responsibility for developing Army leaders for the future.

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Horvath, J. A., Forsythe, G. B., Sweeney, P. J., McNally, J. A., Wattendorf, J., Williams, W. M., and Sternberg, R. J., (1994b). <u>Tacit knowledge in military leadership: Evidence from officer interviews</u> (Technical Report 1018). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A289 840)

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APPENDIX A: ELICITING TACIT KNOWLEDGE THROUGH SEMI-STRUCTURED INTERVIEWS

This document describes a set of methods for eliciting experience-based, tacit knowledge from practitioners of professional disciplines through semi-structured interviews. The methods were developed during the conduct of contract research on behalf of the U.S. Army.

1. Sample

We identified subject and demographic variables across which we sought an even distribution. In the Army study these variables included branch category (i.e., armor, infantry, ordinance), level/rank (i.e., platoon leader, company commander, battalion commander), gender, and ethnicity.

2. Interview Team

We formed two, two-person interview teams. Each team consisting of a lead interviewer and a notetaker. The lead interviewer introduced the subject to the study and took primary responsibility for directing the interview. The note taker took written notes, asked questions of clarification for the written record, and joined the lead interviewer in asking follow-up questions (see below). The interview sessions were also audio taped, with the permission of subjects. In the Army study, we paired civilian researchers with Army officers who alternated in the roles of lead interviewer and note taker.

3. Introduction

When a subject arrived, members of the interview team introduced themselves. After a brief period of small talk, the lead interviewer gave a standardized introduction to the study and to the interview, along the lines outlined below:

Obtain background information:

What is your current job, and how long have you held it ?

Describe goals of the study:

We are trying to understand the key leadership lessons that Army leaders acquire from their experience on the job. If we can identify these lessons, we'll try to find ways to use them to strengthen leader development efforts within the Army.

Preempt likely misunderstandings:

This is not an evaluation of you as a leader. This is not a study comparing West Point graduates to officers from other commissioning sources.

<u>Orient the Subject:</u>

We want to identify specific examples of informal knowledge about leadership at the _____ [platoon, etc.] level. We want to find examples of things about leadership that aren't written in books or taught in classes. Our hunch is that this knowledge is often not discussed openly, but nevertheless is used by leaders as they meet the demands of their jobs. This knowledge may have been learned because of some challenge or problem you faced. It may have been acquired by watching someone else's successes or failures.

We're not interested in the <u>party line</u> or the <u>doctrine</u> or <u>theory</u>. We're also not interested in the purely <u>technical things</u> you learned from experience--supply procedures, maintenance, gunnery, etc. We have a good idea of the tasks associated with your job. We are really interested in the problems and challenges you faced and what you have learned about leadership at your level from these experiences.

4. Request for Stories

Purpose of the interviews was to elicit stories or cases from the subject' leadership experience and to explore the unspoken, practical knowledge gained from or reflected in these cases.

> *Tell us a story about a leadership experience you have had as a [platoon leader/company commander/battalion commander] from which you learned a lesson.*

We sought to keep the focus firmly on the subjects' stories (rather than theories or generalizations about leadership). In this way, we sought to ground our interview method in the tacit-knowledge construct (i.e., in knowledge based upon personal, practical experience). Because the value and implications of remembered experiences was sometimes unclear, we sought to enlist each subject as a partner in making sense of the story, and of the leadership lessons associated with it.

5. Follow-up Questions

Follow-up questions focused on key contextual variables in the stories. Representative examples include...

> *Tell us more about the command climate in the battalion.*

> *So time-in-service was the critical factor here?*

Follow-up questions also focused on goals and alternative courses of action reflected in the stories. Representative examples included...

What exactly did you hope to accomplish?

What was your thinking at this point?

What else did you consider doing at the time?

Finally, follow-up questions focused on identifying practical knowledge of wider applicability (i.e., "lessons learned") derived from the experiences described in the stories. Representative examples included...

What do you think you learned from this experience?

How has this experience affected your approach to [X]?

More generally, we also sought to follow up on portions of the remembered events that appeared to be affect-laden for the subject (i.e., about which they appeared to harbor regrets). As each story progressed, we sought to identify a point of diminishing returns in order to make effective use of the interview hour. When the lead interviewer determined that such a point had been reached, he encouraged the subject to recall and share another story from his or her leadership experience.

6. Debriefing

After each interview concluded, the subject was thanked, given an opportunity to ask questions, and given an opportunity to have his or her name added to a mailing list for research reports issuing from the study in progress.

7. Interview Summaries

Directly after each interview, the designated note taker wrote an interview summary (interviews were scheduled to allow for this). The note taker used his written notes and referred to the audio taped record as needed. Each interview summary contained the following: a) subject information (i.e., subject number, branch, time in job, race/gender designation), b) a summary of each story discussed in the interview, c) annotations to each story indicating key contextual variables, and lessons learned, d) an occasional *n.b.* from the note taker.

When the note taker had completed a draft of the interview summary, he routed it to the lead interviewer for revisions. When disagreements over interpretations occurred between the two interviewers, the audio taped record was consulted in order to resolve the dispute.

8. Identification of Tacit Knowledge Content

A series of steps were taken to ensure that knowledge derived from the interviews met our stated, theory-based definition of tacit knowledge before it was selected for further use in the instrument development process. First, in a series of judging sessions, subject-matter experts applied the following four criterion to the selection of content from the interview summaries:

- The knowledge in question is intimately related to action
- The knowledge in question is relevant to goals that are personally valued by the learner
- The knowledge in question was acquired with minimal or no support from the environment
- The knowledge in question addressed military leadership (defined here as "the exercise of influence over others in order to further the legitimate goals of the organization").

9. Further Development/Validation

A series of additional steps were taken to develop and validate the tacit knowledge obtained in the interview study. A complete and detailed account of research methods may be found in the following documents:

Horvath, J. A., Forsythe, G. B., Sweeney, P. J., McNally, J. A., Wattendorf, J., Williams, W. M., and Sternberg, R. J., (1994b). _Tacit knowledge in military leadership: Evidence from officer interviews_ (Technical Report 1018). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A289 840)

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APPENDIX B: EXAMPLE LEADERSHIP STORIES ELICITED FROM OFFICERS AT THE PLATOON, COMPANY, AND BATTALION LEVELS

The following provides sample leadership stories that were elicited from officers and the tacit knowledge item encoded from those stories. Arrows are used to indicate links that could be established in an on-line database to allow searchers to move between various types of information (e.g., stories and items). Examples provided of content categories and keywords could be used to organize these materials in a database format.

Platoon

Story: Victory Focus Minefield

I learned about what happens to soldiers when they have reached their limit at Victory Focus. One squad was given the mission to put in a minefield for the Infantry battalion. I picked the 2nd Squad because they had better equipment and they were better trained to do the job. But the squad really complained. This happened toward the end of the exercise and they were real tired. So I told them what I wanted done and made the standards clear. When I returned to check, the minefield was not up to standards and the squad was sitting on top of the track eating MREs. I talked to the squad leader, pointing out that the minefield was not up to standard. He told me the squad wasn't interested in my standards and that what they did was the best I was going to get.

I tried to convince him that I wouldn't give them another mission until they had a chance to rest. I just needed them to do just one more mission. As it turned out, they did re-do the minefield to standard and I gave them some time off to rest.

Category: Motivating Subordinates
Keywords: fatigue, insubordination, motivation

Tacit knowledge item: How to determine when your soldiers
   have reached their limits.

IF you have good soldiers,
and
IF they start to back-talk their leaders,
or
IF soldiers start to make negative comments about their leaders,
and
IF their joking turns to rebellion,
or
IF their joking turns to laziness,
and
IF your soldiers start to ignore orders,
THEN you should not assign them another mission until they have time to rest.

BECAUSE they have reached their limits. A leader can use the above indicators to tell when his or her soldiers need to rest in order to maintain the unit's combat effectiveness.

Category: Motivating Subordinates
Keywords: fatigue, insubordination, motivation

Company

Story: When to Report Bad News

It is important for a commander to know when to report bad news to
the boss and when to withhold it. For example, my unit lost a weapon
at NTC. We had completed a night move and had been in position for
about two hours. The weapon was identified as missing at about
midnight. Section Chief told me that the weapon was in this position
because he had seen it during the sensitive item checks which is part
of position improvement. I talked to each member of the section and
determined that the weapon was in the position. We looked for the
weapon from about midnight to 0300. During this time, I chose not to
notify the battalion commander because I was confident that the
weapon was in the position. At 0300, I went to the TOC and notified
the battalion executive officer that we had a weapon missing because
a sensitive item report was due to brigade at 0400. I had to report
the weapon missing then because of ethical reasons. The battalion
executive officer called the battalion commander on the land line and
notified him of the situation. The battalion commander was not upset,
he wanted to know the circumstances. I told the battalion commander
what I had done so far and told him that I was confident that we
would find the weapon at first light. I briefed the battalion
commander on action that I needed to take IAW the TACSOP. Also, I
told him what I planned to do if the weapon was not found in the
current position. We found the weapon in ten minutes after the sun
came up. The battalion commander was pleased that we followed the
SOPs when critical incidents happened.

Tacit knowledge category: Establishing Trust
Keywords: reporting negative information, establishing trust

Tacit knowledge item: When to hold-off on reporting bad news
about a lost sensitive item.

IF waiting to report negative information about a lost sensitive
item does not violate ethics, e.g. involve sending in a false
report
and
IF you are confident that you can correct the problem before the
next reporting period
and
IF you trust the soldiers involved in the incident
and
IF your commander trusts you and allows you a degree of leeway
THEN hold-off on reporting the lost sensitive item to battalion
until the next scheduled reporting period. Take action to
correct the situation and to determine circumstances. Look into
SOPs to determine what must be done and how to report the
missing item, in case it is not found by the next sensitive item
report. To report the incident, notify higher headquarters in
person
BECAUSE holding-off on reporting a missing sensitive item gives
you time to correct the situation and protects the unit from
unnecessary bad publicity.

Tacit knowledge category: Establishing Trust
Keywords: reporting negative information, establishing trust

Battalion

Story: Great Lengths to Carry Out Missions

The BN CDR noticed that his company commanders were trying so hard to be successful that they would accept missions that their units did not have the capabilities to execute. Thus, the companies and the commanders would expend a great deal of effort and time to accomplish the mission without asking for help from the Battalion in order to demonstrate their talents as leaders. The BN CDR gave one of his commanders a mission and the commander worked his unit overtime for two weeks to accomplish it. The BN CDR realized that the same mission could have been accomplished in two days if the commander had requested resources from the battalion. After the incident, the BN CDR made it a point to ask the company commanders to realistically assess their units' resources before taking on a mission. The battalion commander felt that all commanders wanted to succeed and earn the top block rating due to the competitive environment in today's Army.

Tacit knowledge category: Communicating
Keywords: protecting soldiers, resource assessment

Tacit knowledge item:

How to prevent your commanders from taking on missions that their units do not have the capabilities to perform (taking care of soldiers/ protecting the organization).

IF your company commanders have a strong desire to be successful and earn top block ratings
and
IF they also have a tendency to take on resource intensive missions that exceed their capabilities
and
IF the commanders are reluctant to ask higher headquarters for help when they have missions that over tax their units' resources
THEN require commanders to conduct a resource assessment before they take on missions
BECAUSE an accurate resource assessment should indicate whether or not the unit has the resources to handle the mission. This may prevent commanders from taking on a mission that would overly burden their unit.

Tacit knowledge category: Communicating
Keywords: protecting soldiers, resource assessment

APPENDIX C: MILESTONES IN TACIT KNOWLEDGE ACQUISITION:
PLATOON, COMPANY, AND BATTALION

This document, excerpted from Horvath et al. (in press),
describes the developmental portrait that emerged from tacit
knowledge interviews, expert sorting, and cluster analysis. Each
subsection addresses a different leadership level (platoon,
company or battalion).

Platoon Level

Platoon leaders have very limited experience in Army
leadership--typically one to three years. Nevertheless, they are
responsible for supervising soldiers (approximately 25-45 in
number) with much longer time in service. They also exercise
direct leadership through face-to-face interactions with their
subordinates, and they must do so without much in the way of
formal position power. Not surprisingly, the tacit knowledge
about leadership at the platoon level reflects these challenges.
The picture that emerges from the tacit knowledge for platoon
leaders is that of men and women trying to get a foothold in
their organizations. Many of the stories contained tacit
knowledge about motivating subordinates. Motivating relatively
more experienced subordinates in direct encounters without much
formal authority also raises issues of personal credibility for
platoon leaders. Similarly, credibility must be established with
the boss if platoon leaders are to protect their limited
autonomy. Not surprisingly, our platoon leaders talked about how
they established credibility with their subordinates and their
boss. But establishing credibility and authority over others
with greater experience can be stressful. Hence, tacit knowledge
about managing the self was relatively more frequent at this
level than at higher levels (company and battalion). Finally, we
were surprised that platoon leaders had few stories about
developing subordinates--an important Army leadership competency.
This result may reflect a limited capacity to develop
subordinates due, in part, to the fact that platoon leaders have
fewer resources, less discretion, and limited experience--all
necessary preconditions for developing others.

Company Level

What is the typical experience of company commanders? They
have more experience than platoon leaders, having themselves
served as a platoon leader, completed officers' advanced
training, and often held positions on a battalion-level staff.
They have considerably more position power--they exercise the
authority to administer nonjudicial punishment (e.g., reduce rank
or withhold pay) and they decide how missions will be
accomplished. Furthermore, they lead larger groups (typically
120 to 200 soldiers); hence, they have less direct contact with
their subordinates. Again, the tacit knowledge about leadership
at the company level reflects this organizational reality.

In general, the company commanders we interviewed appeared to be caught between the interpersonal requirements of direct leadership and the emerging need to take an institutional perspective to fulfill their responsibilities. Their increased discretion is reflected in the emergence of tacit knowledge about directing and supervising others. By contrast, stories about establishing oneself did not appear, either because company commanders have already mastered these lessons or because the aura of command takes care of credibility issues. Finally, the company commander's role requires the incumbent to consider the needs of subordinates and simultaneously coordinate with higher headquarters. Hence, we found in the stories of our company commanders tacit knowledge about cooperating with others and balancing mission accomplishment against the needs of subordinates.

Battalion Level

Finally, what is the typical experience of battalion commanders? First, battalion commanders have considerable experience in the Army, having served from sixteen to twenty years as officers. Their selection for command, the result of a highly competitive process, is a public recognition of their past success. Third, they enjoy considerable power and discretion in discharging the legal authority of command. Finally, the size of the groups they lead (typically 500 to 700 soldiers) makes it impossible to lead through direct, face-to-face encounters. Consequently, their influence is more often indirect than is the influence of leaders at lower levels.

The tacit knowledge we obtained from battalion commanders suggests that system-level thinking is a key developmental challenge at this level. Tacit knowledge for protecting the organization and managing organizational change was unique to our battalion commanders' stories. We also found that the composition of tacit knowledge about communicating differed from that obtained at the lower levels. That is, battalion commanders had learned to use indirect methods and systems of communication, whereas the tacit knowledge of leaders at lower levels concerned the exercise of leadership in face-to-face encounters. Finally, tacit knowledge about dealing with poor performers was unique to this level, a finding we attribute to the authority and discretion regarding personnel matters that is vested in battalion commanders.

APPENDIX D: SAMPLE QUESTIONS FROM TACIT KNOWLEDGE INVENTORIES AT
THE PLATOON, COMPANY, AND BATTALION LEVELS

The following provides sample questions from the tacit knowledge
inventories. For each question, reference is provided to the
leadership stories from which the tacit knowledge was derived,
and the tacit knowledge item encoded from those stories. Arrows
are used to indicate links that could be established in an on-
line database to allow searchers to move between various types of
information (e.g., questions and stories). For example, an
officer might complete a tacit knowledge question and then learn
more about the situation by accessing the related leadership
story.

Platoon
Category: Establishing Credibility

P8. You are a new platoon leader who takes charge of your platoon when they return from a lengthy combat deployment. All members of the platoon are war veterans, but you did not serve in the conflict. In addition, you failed to graduate from Ranger School. You are concerned about building credibility with your soldiers. What should you do?

_____ Do not change procedures that work.

_____ Ask the members of the platoon to share their combat experience: Ask what they learned and how it can help the platoon.

_____ Work hard to get into excellent physical shape so that you excel in PT .

_____ Maintain good military bearing by wearing a pressed uniform, shined boots, and having good posture.

_____ Speak to your soldiers with a tone of voice that conveys respect for them.

_____ Study field manuals and military history in order to gain technical and tactical competence.

_____ Defer to soldiers on matters related to their combat experience, thus acknowledging that they know more than you do in some areas.

_____ Tell your NCOs about all of the studying you have done to increase your competence.

_____ Listen frequently to your soldiers; hear their views, opinions, comments, and suggestions.

_____ Announce right up front that you are in charge and the soldiers must accept this fact and treat you with appropriate respect.

Leadership story: Taking Charge
1. I was a new second lieutenant and placed in charge of a platoon of mostly combat veterans. The platoon had been together during Desert Storm and thus was a very cohesive unit. The men of the platoon did not like the old platoon leader because he would not listen to the soldiers and forced policies and procedures onto them. Before taking over the platoon, I was very nervous taking command of a platoon of combat veterans.

When I took over the platoon, I was willing to listen and act on suggestions from the PSG and soldiers because they possessed the expertise. I turned to the PSG and two tank commanders for advice and they appreciated my seeking their expertise. By demonstrating my willingness to listen to the soldiers of my platoon, they more readily accepted me. I discovered the way to handle command veterans is to listen and be willing to learn.

Leadership story: Taking Charge
2. I took charge of my platoon when they returned from the Gulf War. Consequently, all members of the Platoon were war veterans and I felt he had zero credibility since I did not serve in the Gulf or pass Ranger School. I put a lot of effort into developing a plan to build my credibility. I work hard to get in excellent physical shape so I could excel in PT. Also, I studied Field Manuals and military history in order to gain technical and tactical competence. I ensured I always had good military bearing by having a pressed uniform, highly shine boots, and good posture. When I spoke to my soldiers I used a tone of voice that conveyed respect. I did not change procedures that worked and I was willing to listen to my soldiers.

Tacit knowledge item: How to establish
rapport and credibility with combat veterans.

IF you are taking over a unit that has combat
veterans in it
and
IF you do not have combat experience
and
IF you are worried about being able to establish
credibility with the veterans
THEN seek out and listen to your veterans'
suggestions and advice
BECAUSE listening to your combat veterans'
suggestions and advice demonstrates that you
respect them and are willing to learn from
them.

Tacit knowledge item: How to establish your credibility
when taking over a unit with combat veterans.

IF you are taking over a unit that has combat veterans in it
and
IF you do not have combat experience
and
IF you are worried about establishing credibility in your
platoon
THEN work hard to get into top physical shape so you
can excel in PT. Increase your technical and tactical
competence by reading Field Manuals and military history.
Present good military bearing by having your boots highly
shined, uniforms pressed, and ensuring that you have erect
posture. When you speak to your soldiers, use a tone of
voice that conveys respect. Do not change procedures that
worked. Listen to your soldiers comments and
suggestions.
BECAUSE the above activities build the skills and image
necessary to establish credibility with your soldiers.

<u>Company</u>
Category: Motivating Subordinates

C15. You are a company commander. You have a platoon leader who is causing you problems. Once he was cleaning his weapon on the mail loading dock and he pointed it at a civilian. Another time he was late to a range. He frequently argues with you and does not do what you ask him to do. This is a new problem for your first sergeant--he has never experienced this situation before. The behaviors are continuing and growing in severity to a point where the lieutenant is insubordinate. What should you do?

_____ If a relatively severe instance of insubordinate behavior occurs in public, shift the focus and avoid humiliating the platoon leader in public, but have him see you one-on-one later on.

_____ Use all assets available to you--but do not involve your boss (the battalion commander).

_____ Deal with the situation immediately--do not let it fester.

_____ Counsel the platoon leader only when his/her performance warrants it.

_____ Ask the battalion commander to give him a letter of reprimand.

_____ If a severe instance of insubordinate behavior occurs in public, dismiss the platoon leader from the room and deal with him later.

_____ Before taking action, find out if the platoon leader has been counseled before for his bad behavior.

_____ Talk with the platoon leader and work out the problem.

_____ Establish regular sessions during which you counsel the platoon leader about his performance.

_____ To prepare for counseling sessions, get together with your first sergeant and role play various scenarios for dealing with the platoon leader including his potential reactions to your actions.

_____ Wait awhile to see if the situation improves on its own.

_____ If an instance of insubordinate behavior occurs between the two of you in private, immediately reprimand the platoon leader.

Leadership story: The Insubordinate Platoon Leader

I had a platoon leader who was insubordinate and disobedient with me. One time he was cleaning his weapon on the mail loading dock and he pointed it at a civilian. Another time he was late to a range. He frequently argued with me and would not do what I asked him to do. This was a surprise to me, because I didn't expect to have problems of this nature with officers. It was also a new problem for my 1SG.

At first, I tried to talk to him. Then I began to counsel him formally about his performance. Eventually, the counseling became more serious. He didn't like it, and went to my O6 commander along with a buddy of his. As it turned out, he was disrespectful to my commander, so she locked his heals and told him to shape up. His performance never improved. I didn't recommend him for promotion and gave him a bad OER. On one occasion I also had the colonel give him a letter of reprimand.

I had to get myself up for these counseling sessions. To do this, I would role play various scenarios with my 1SG.

Tacit knowledge item: How to handle and insubordinate officer.

IF a junior officer is insubordinate
and
IF the insubordination occurs between the two of you in private
THEN immediately reprimand the officer
BECAUSE you need to correct the insubordination in order to protect your authority and the morale of your unit
ELSE
IF the insubordination occurs in public
and
IF the insubordination is not severe
THEN shift the focus and avoid humiliating the person in public, but have the person see you one-on-one later
BECAUSE not correcting the officer in public saves him or her from embarrassment and allows you time to cool off
ELSE
IF the insubordination is severe
THEN dismiss the insubordinate officer from the room and deal with him or her later
BECAUSE dismissing the insubordinate officer preserves your authority and allows you time to think about how to handle it. Also, it may serve to prevent a situation from escalating to the point you may not be able to handle.

Tacit knowledge item: How to prepare for difficult counseling sessions.

IF you anticipate difficulties caused by the counselee's response to performance counseling
THEN role play your presentation and rehearse your reactions to counselee's potential responses
BECAUSE rehearsing your presentation and role playing possible reactions helps build your confidence so that you can control the situation.

Battalion

B3. You are a battalion commander and it is the end of your first battle at a major externally-evaluated training exercise, during which your unit revealed some major shortcomings. During the After Action Review, the Chief Evaluator is highly critical of the battalion and dwells on all the negative things your unit did that day. You carefully record all of the negative observations, but you know full well that the battalion also did some very positive things that day. What should you do?

_____ Leave the After Action Review and return to your units; once there, communicate exactly what the Evaluator said.

_____ If you have a good relationship with your CSM or other similar person, discuss your frustrations and feelings with him or her.

_____ Forget about trying to get any positive feedback: Thank the Evaluator directly for the negative feedback, say you will deal with the problems immediately, and do so without expecting anything more from him.

_____ Be careful not to vent your frustrations with the Evaluator's feedback in front of the soldiers or your junior officers.

_____ Ask the Chief Evaluator if he has anything else he would like to say.

_____ Mention one or two successes the battalion had, and ask the Evaluator if he would like to comment on these positive events.

_____ Leave the After Action Review and return to your units, but when you report to them make sure to note the successes that occurred that day as well as the failures and shortcomings.

_____ Speak to the Evaluator at another time, and state your desire to receive positive as well as negative feedback so that you know what the units are doing right and wrong.

_____ Share your feelings with a friend or confidante at your own level to help you work through any negative feelings.

Leadership story: Handling Negative Feedback

After the first day at the NTC, I went to the head of OC to receive my after action review. The head OC was sitting in the rear of his track with his back to me. When I announced myself, he turned around and told me about the negative things my unit did that day. After I recorded all of the negative observations, I asked him if he had anything else for me because the battalion did some very positive things that day. He told me that, "There was not time at the NTC for positive feedback."

I learned that I could not take only the negative news back to the batteries or take my frustrations out on them--I had to suck it up. I think the OC was testing me to see how I reacted to only negative feedback.

I wish I had a CSM during the NTC rotation because he is a battalion commander's professional friend. He is one of the most important persons in the world to the battalion commander. A commander can talk about his frustrations to the CSM so that he does not take them out on the soldiers.

Tacit knowledge item: How to manage your frustrations as a commander.

IF you receive only negative feedback about your unit's performance
and
IF the lack of recognition of positive actions causes feelings of frustration
or
IF you need somebody to share your feelings with
and
IF you have a good relationship with your CSM
THEN discuss your frustrations and feelings with him or her
BECAUSE talking through your feelings with the CSM may prevent you from venting your feelings
on your soldiers.

APPENDIX E: EXAMPLES OF EXPERT RESPONSE PROFILES FOR TACIT
KNOWLEDGE QUESTIONS AT THE PLATOON, COMPANY, AND BATTALION LEVELS

The following are expert response profiles for sample questions
from the tacit knowledge inventories at each level. The complete
tacit knowledge question to be used in the example is presented
first. The graphs that follow show the distribution of ratings
among experts (i.e., response frequencies) for each of the
response options within that tacit knowledge question. Below the
graph is information for that response option about the experts
mean (average rating among all experts), median (midpoint at
which half the experts were below and half above this rating),
mode (rating most frequently given by experts), and standard
deviation (variability among expert ratings).

As an example, consider the expert profiles provided for the
sample platoon question #8. For the first response option, "Do
not change procedures that work, " it is apparent from the graph
that the experts generally considered this to be a good response
for establishing credibility for the given situation. The
average rating and most frequently used rating was "8" which
translates to a "somewhat good" to "extremely good" response
option. The standard deviation, which is 1.02, indicates that the
experts were in agreement that this was a good response, a lower
standard deviation indicating less variability among the experts.

Platoon

1	2	3	4	5	6	7	8	9
Extremely Bad		Somewhat Bad		Neither Bad Nor Good		Somewhat Good		Extremely Good

P8. You are a new platoon leader who takes charge of your platoon when they return from a lengthy combat deployment. All members of the platoon are war veterans, but you did not serve in the conflict. In addition, you failed to graduate from Ranger School. You are concerned about building credibility with your soldiers. What should you do?

_____ Do not change procedures that work.

_____ Ask the members of the platoon to share their combat experience: Ask what they learned and how it can help the platoon.

_____ Work hard to get into excellent physical shape so that you excel in PT .

_____ Maintain good military bearing by wearing a pressed uniform, shined boots, and having good posture.

_____ Speak to your soldiers with a tone of voice that conveys respect for them.

_____ Study field manuals and military history in order to gain technical and tactical competence.

_____ Defer to soldiers on matters related to their combat experience, thus acknowledging that they know more than you do in some areas.

_____ Tell your NCOs about all of the studying you have done to increase your competence.

_____ Listen frequently to your soldiers; hear their views, opinions, comments, and suggestions.

_____ Announce right up front that you are in charge and the soldiers must accept this fact and treat you with appropriate respect.

P.8 _____ Do not change procedures that work.
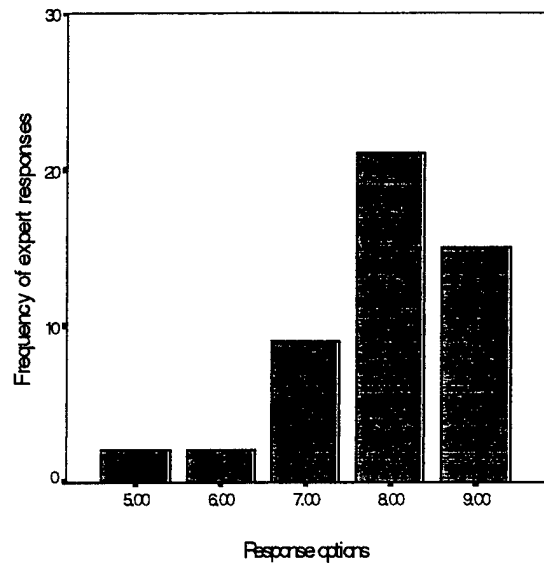
Mean	Median	Mode	St Dev
7.92	8	8	1.02

P8._____ Ask the members of the platoon to share their combat experience:
Ask what they learned and how it can help the platoon.
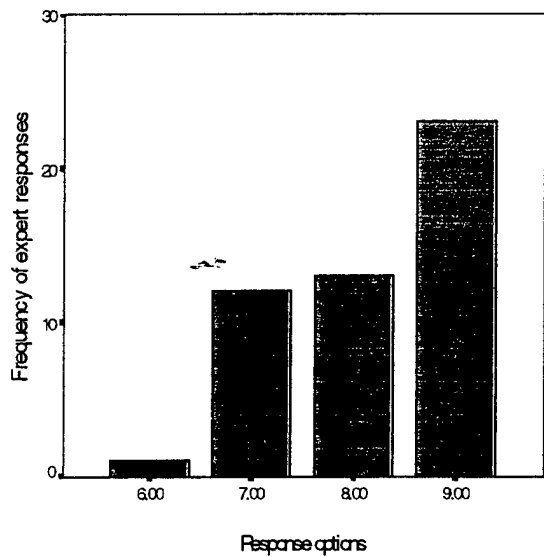
Mean	Median	Mode	St Dev
8.18	8	9	.88

P8._____ Work hard to get into excellent physical shape so that you excel in
PT .
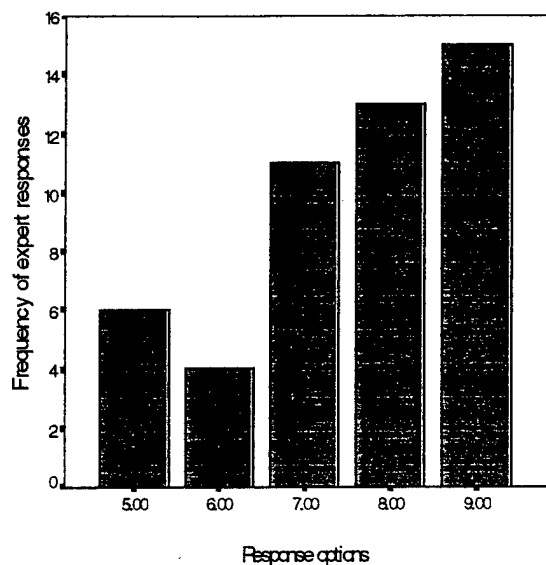
Mean	Median	Mode	St Dev
7.55	8	9	1.34

P8._____ Maintain good military bearing by wearing a pressed uniform, shined
boots, and having good posture.
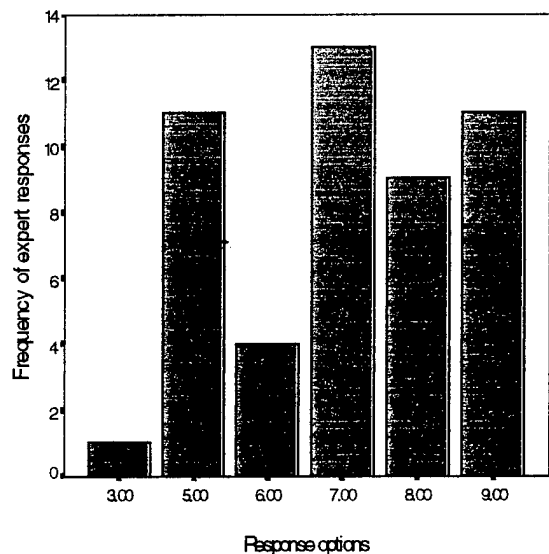
Mean	Median	Mode	St Dev
7.02	7	7	1.56

E4

P8._____ Speak to your soldiers with a tone of voice that conveys respect for them.
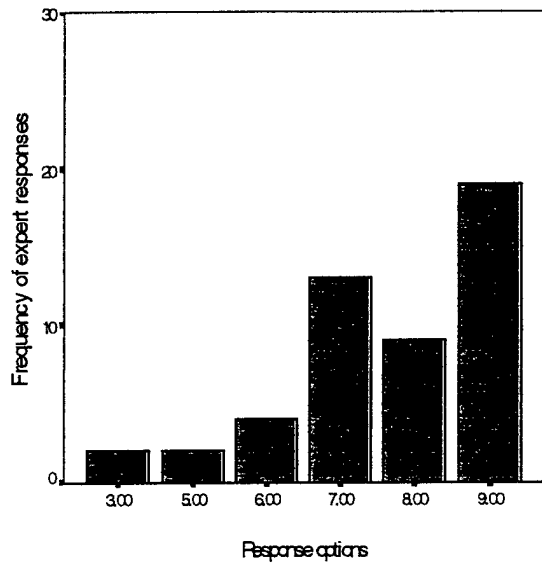
Mean	Median	Mode	St Dev
7.63	8	9	1.51

P8._____ Study field manuals and military history in order to gain technical and tactical competence.
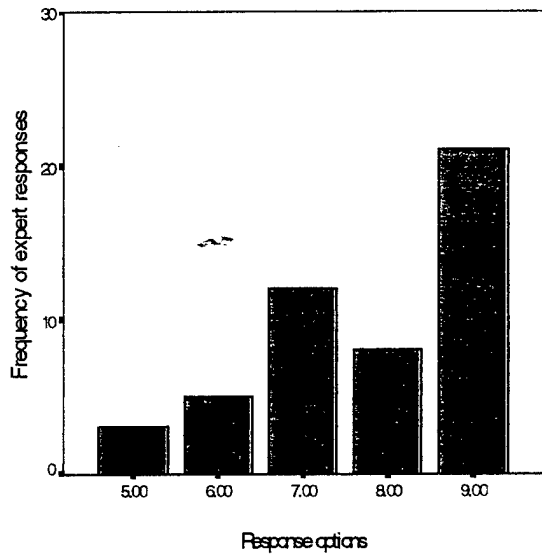
Mean	Median	Mode	St Dev
7.80	8	9	1.27

P8._____ Defer to soldiers on matters related to their combat experience, thus acknowledging that they know more than you do in some areas.
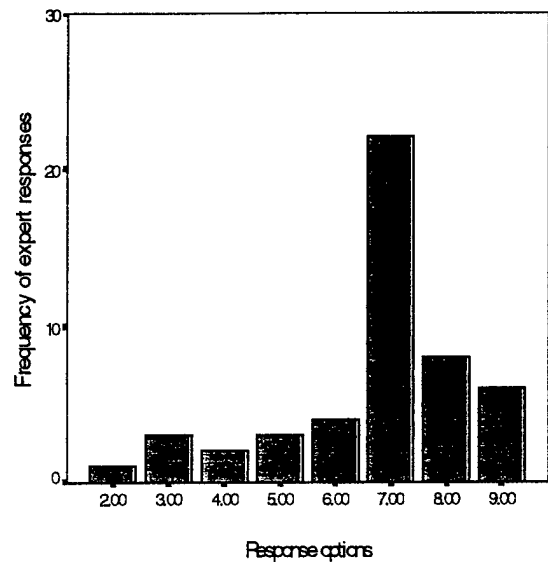
Mean	Median	Mode	St Dev
6.73	7	7	1.68

P8._____ Tell your NCOs about all of the studying you have done to increase your competence.
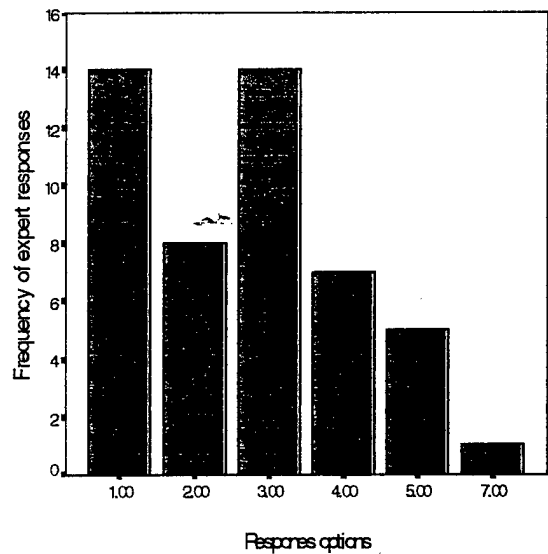
Mean	Median	Mode	St Dev
2.69	3	1,3	1.46

P8._____ Listen frequently to your soldiers; hear their views, opinions, comments, and suggestions.
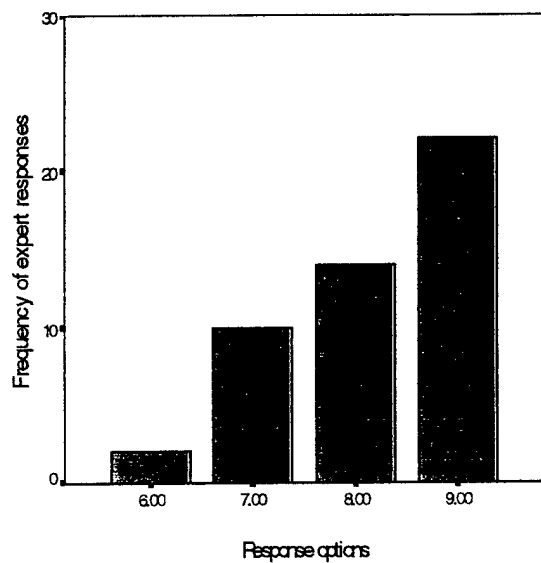
Mean	Median	Mode	St Dev
8.17	8	9	.91

P8._____ Announce right up front that you are in charge and the soldiers must accept this fact and   treat you with appropriate respect.
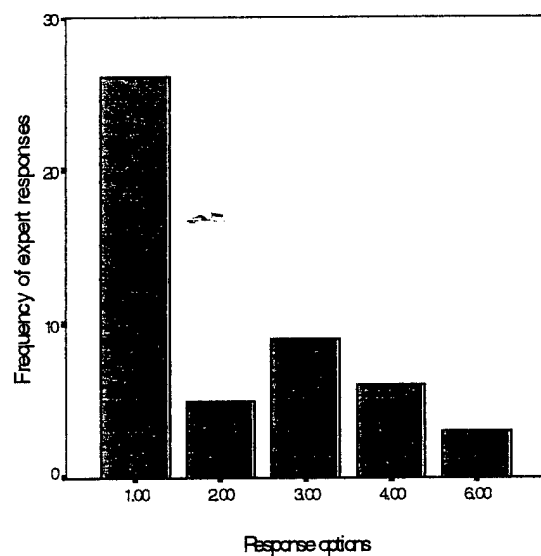
Mean	Median	Mode	St Dev
2.14	1	1	1.49

<u>Company</u>

1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Extremely Bad		Somewhat Bad		Neither Bad Nor Good		Somewhat Good		Extremely Good

C15. You are a company commander. You have a platoon leader who is causing you problems. Once he was cleaning his weapon on the mail loading dock and he pointed it at a civilian. Another time he was late to a range. He frequently argues with you and does not do what you ask him to do. This is a new problem for your first sergeant--he has never experienced this situation before. The behaviors are continuing and growing in severity to a point where the lieutenant is insubordinate. What should you do?

_____ If a relatively severe instance of insubordinate behavior occurs in public, shift the focus and avoid humiliating the platoon leader in public, but have him see you one-on-one later on.

_____ Use all assets available to you--but do not involve your boss (the battalion commander).

_____ Deal with the situation immediately--do not let it fester.

_____ Counsel the platoon leader only when his/her performance warrants it.

_____ Ask the battalion commander to give him a letter of reprimand.

_____ If a severe instance of insubordinate behavior occurs in public, dismiss the platoon leader from the room and deal with him later.

_____ Before taking action, find out if the platoon leader has been counseled before for his bad behavior.

_____ Talk with the platoon leader and work out the problem.

_____ Establish regular sessions during which you counsel the platoon leader about his performance.

_____ To prepare for counseling sessions, get together with your first sergeant and role play various scenarios for dealing with the platoon leader including his potential reactions to your actions.

_____ Wait awhile to see if the situation improves on its own.

_____ If an instance of insubordinate behavior occurs between the two of you in private, immediately reprimand the platoon leader.

C15._____ If a relatively severe instance of insubordinate behavior occurs in public, shift the focus and avoid humiliating the platoon leader in public, but have him see you one-on-one later on.

Response options
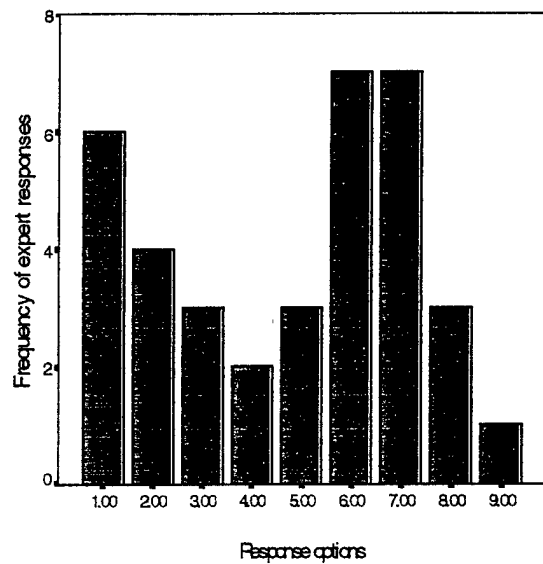
Mean	Median	Mode	St Dev
4.72	5.5	6,7	2.51

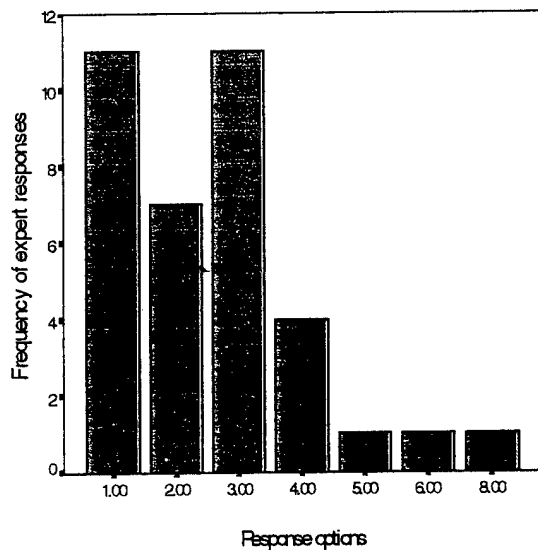C15._____ Use all assets available to you--but do not involve your boss (the battalion commander).

Response options
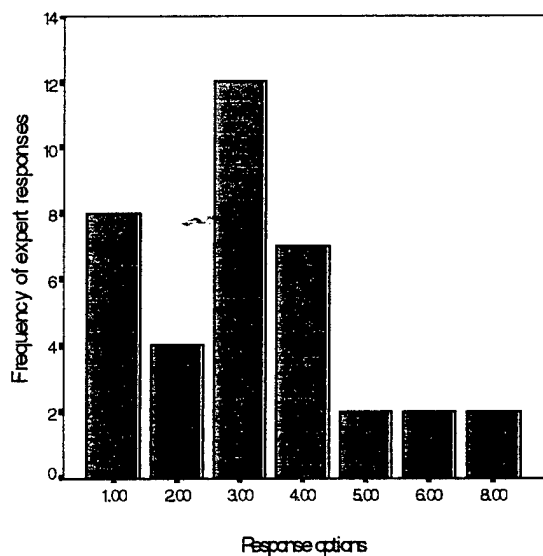
Mean	Median	Mode	St Dev
3.19	3	3	1.80

C15._____ Deal with the situation immediately--do not let it fester.
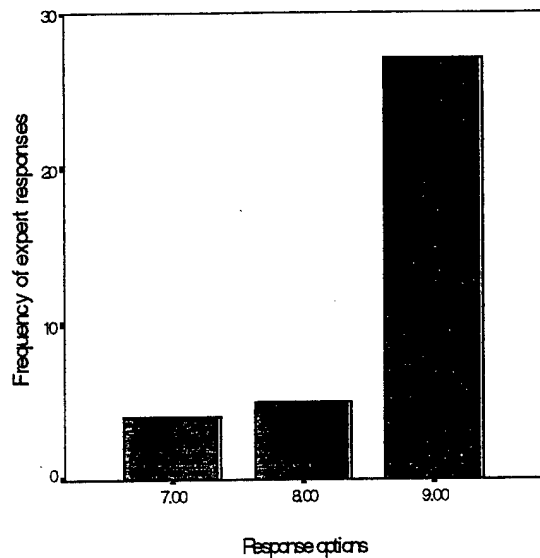
Mean	Median	Mode	St Dev
8.64	9	9	.68

C15._____ Counsel the platoon leader only when his/her performance warrants it.

Mean	Median	Mode	St Dev
2.58	2.5	1,3	1.57

C15._____ Ask the battalion commander to give him a letter of reprimand.
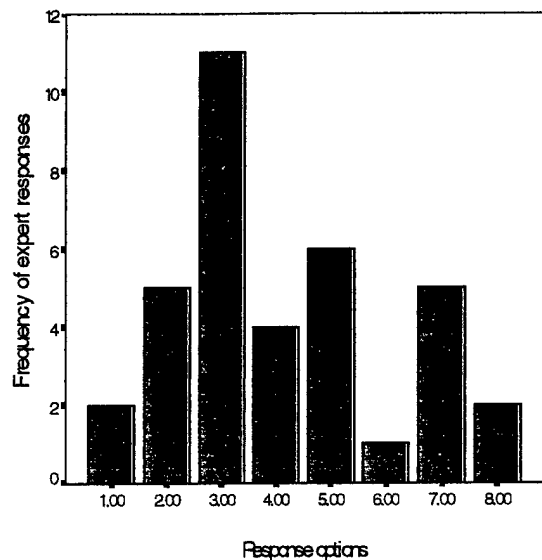
Mean	Median	Mode	St Dev
4.11	3.5	3	1.97

C15._____ If a severe instance of insubordinate behavior occurs in public, dismiss the platoon leader   from the room and deal with him later.
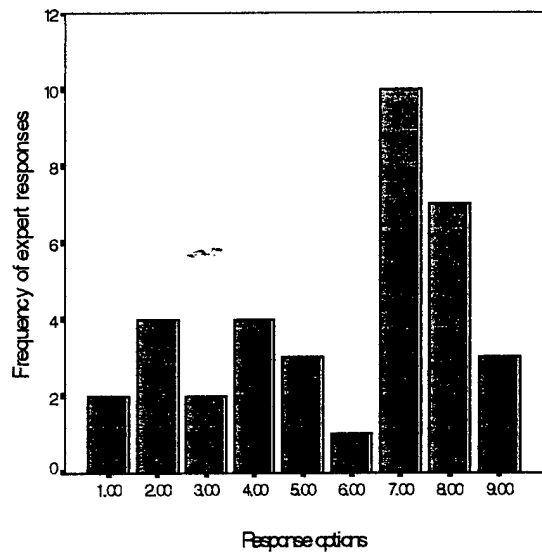
Mean	Median	Mode	St Dev
5.72	7	7	2.47

C15._____ Before taking action, find out if the platoon leader has been counseled before for his bad behavior.
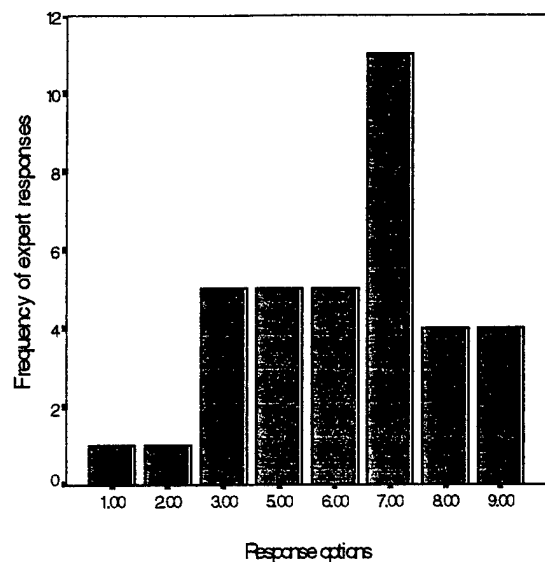
Mean	Median	Mode	St Dev
6.06	7	7	2.10

C15._____ Talk with the platoon leader and work out the problem.
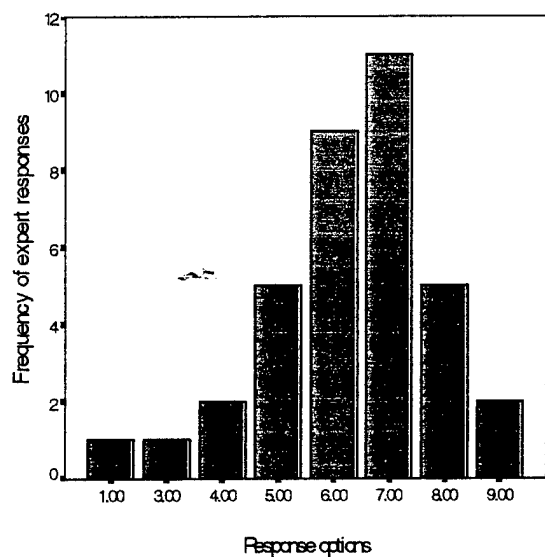
Mean	Median	Mode	St Dev
6.28	6.5	7	1.63

C15._____ Establish regular sessions during which you counsel the platoon leader about his performance.
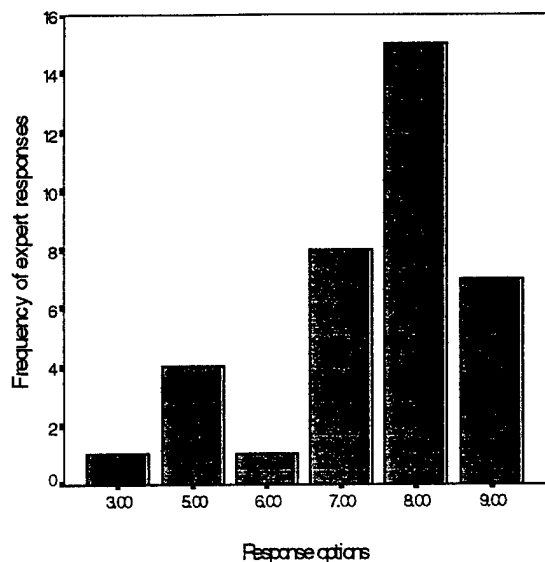
Mean	Median	Mode	St Dev
7.44	8	8	1.40

C15._____ To prepare for counseling sessions, get together with your first sergeant and role play various scenarios for dealing with the platoon leader including his potential reactions to your actions.
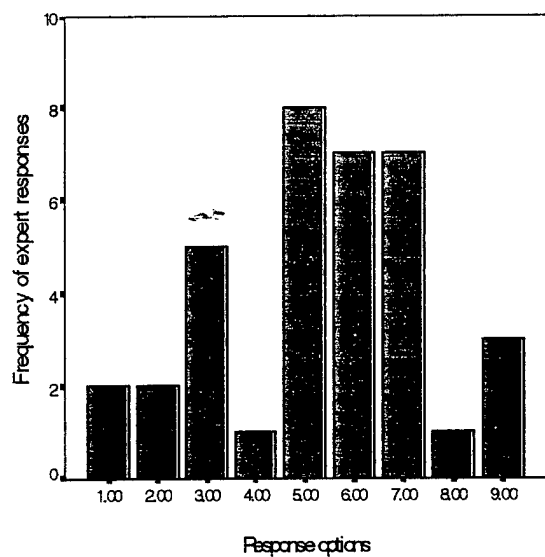
Mean	Median	Mode	St Dev
5.30	5.5	5	2.14

C15._____ Wait awhile to see if the situation improves on its own.
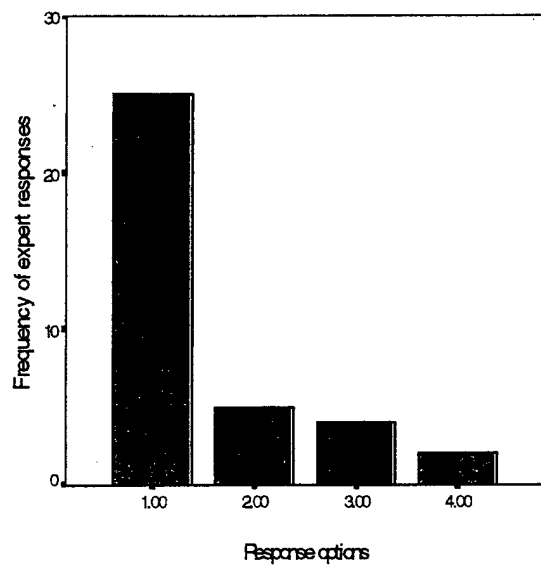
Mean	Median	Mode	St Dev
1.53	1	1	.91

C15._____ If an instance of insubordinate behavior occurs between the two of you in private, immediately reprimand the platoon leader.
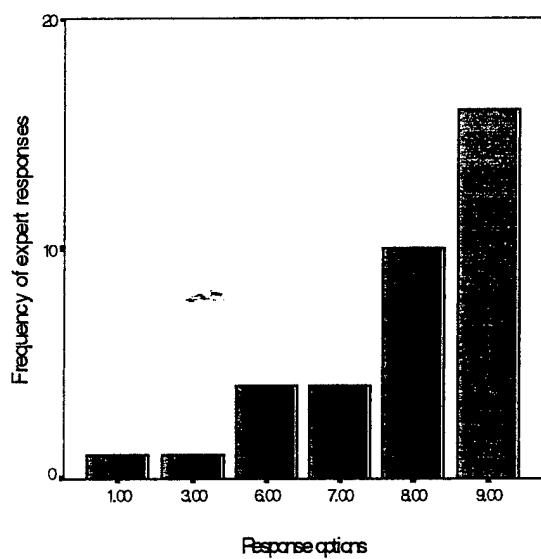
Mean	Median	Mode	St Dev
7.78	8	9	1.76

E14

Battalion

1	2	3	4	5	6	7	8	9
Extremely Bad		Somewhat Bad		Neither Bad Nor Good		Somewhat Good		Extremely Good

B3. You are a battalion commander and it is the end of your first battle at a major externally-evaluated training exercise, during which your unit revealed some major shortcomings. During the After Action Review, the Chief Evaluator is highly critical of the battalion and dwells on all the negative things your unit did that day. You carefully record all of the negative observations, but you know full well that the battalion also did some very positive things that day. What should you do?

_____ Leave the After Action Review and return to your units; once there, communicate exactly what the Evaluator said.

_____ If you have a good relationship with your CSM or other similar person, discuss your frustrations and feelings with him or her.

_____ Forget about trying to get any positive feedback: Thank the Evaluator directly for the negative feedback, say you will deal with the problems immediately, and do so without expecting anything more from him.

_____ Be careful not to vent your frustrations with the Evaluator's feedback in front of the soldiers or your junior officers.

_____ Ask the Chief Evaluator if he has anything else he would like to say.

_____ Mention one or two successes the battalion had, and ask the Evaluator if he would like to comment on these positive events.

_____ Leave the After Action Review and return to your units, but when you report to them make sure to note the successes that occurred that day as well as the failures and shortcomings.

_____ Speak to the Evaluator at another time, and state your desire to receive positive as well as negative feedback so that you know what the units are doing right and wrong.

_____ Share your feelings with a friend or confidante at your own level to help you work through any negative feelings.

B3._____ Leave the After Action Review and return to your units; once there, communicate exactly what the Evaluator said.
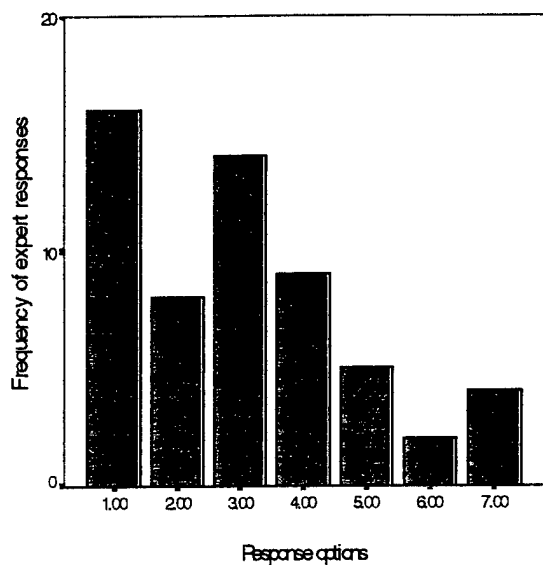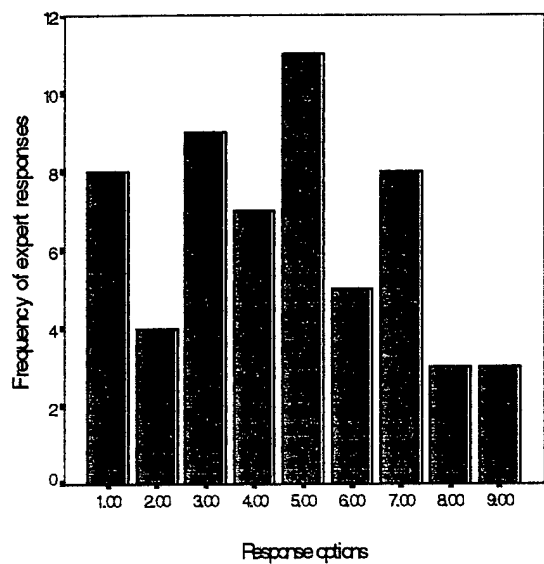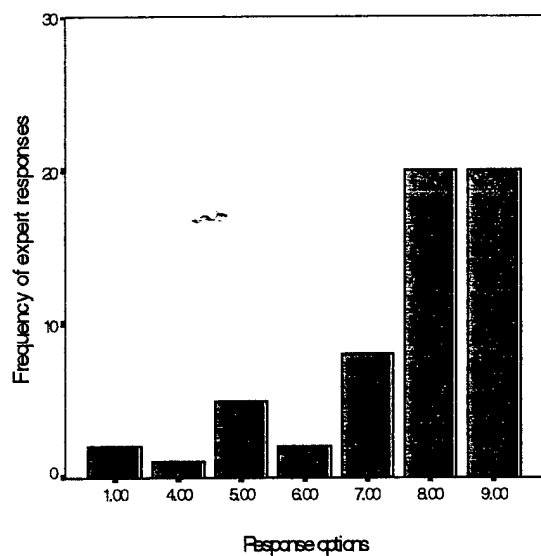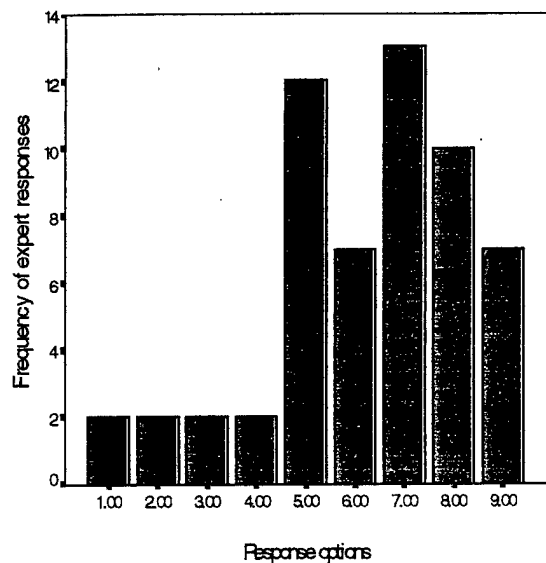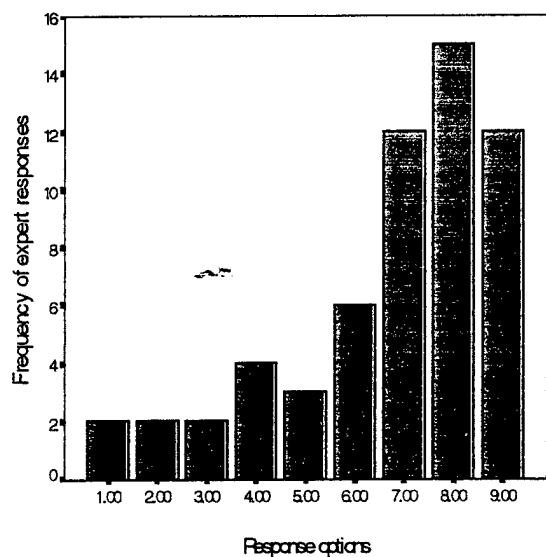

Mean	Median	Mode	St Dev
3.02	3	1	1.79

B3._____ If you have a good relationship with your CSM or other similar person, discuss your frustrations and feelings with him or her.
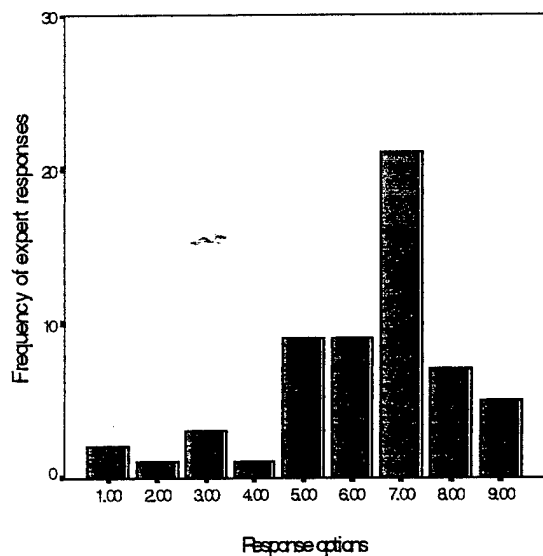
Mean	Median	Mode	St Dev
6.28	7	7	1.85

B3._____ Forget about trying to get any positive feedback: Thank the
Evaluator directly for the negative feedback, say you will deal with the
problems immediately, and do so without expecting anything more from him.

Mean	Median	Mode	St Dev
4.53	5	5	2.32

B3._____ Be careful not to vent your frustrations with the Evaluator's
feedback in front of the soldiers or your junior officers.

Mean	Median	Mode	St Dev
7.58	8	8,9	1.80

B3._____ Ask the Chief Evaluator if he has anything else he would like to say.

Mean	Median	Mode	St Dev
6.24	7	7	2.04

B3._____ Mention one or two successes the battalion had, and ask the Evaluator if he would like to comment on these positive events.

Mean	Median	Mode	St Dev
6.74	7	8	2.16

B3._____ Leave the After Action Review and return to your units, but when you report to them make sure to note the successes that occurred that day as well as the failures and shortcomings.
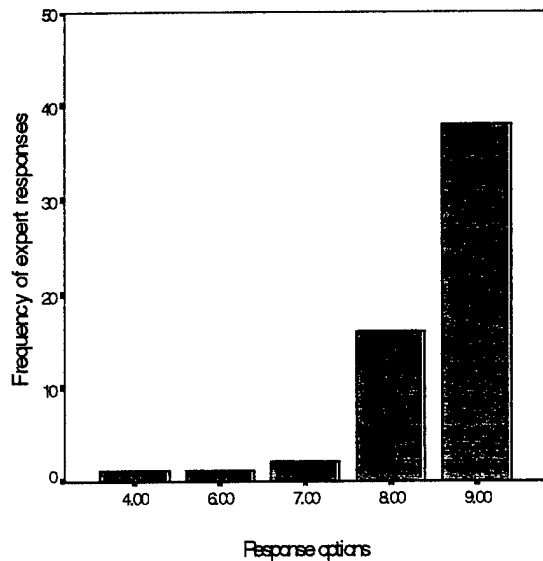
Mean	Median	Mode	St Dev
8.52	9	9	.88

B3._____ Speak to the Evaluator at another time, and state your desire to receive positive as well as negative feedback so that you know what the units are doing right and wrong.
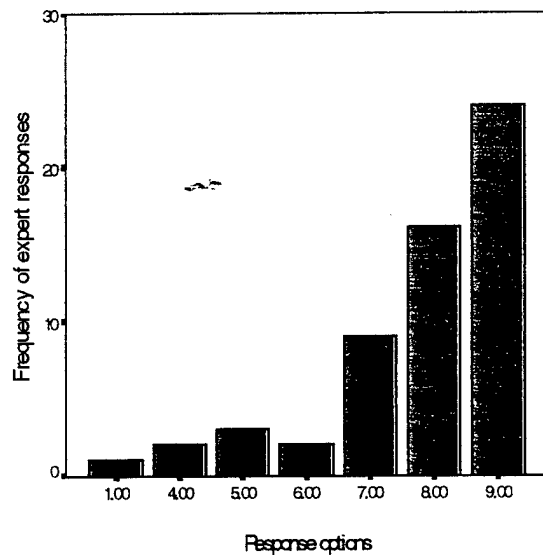
Mean	Median	Mode	St Dev
7.77	8	9	1.61

B3._____ Share your feelings with a friend or confidante at your own level to help you work through any negative feelings.
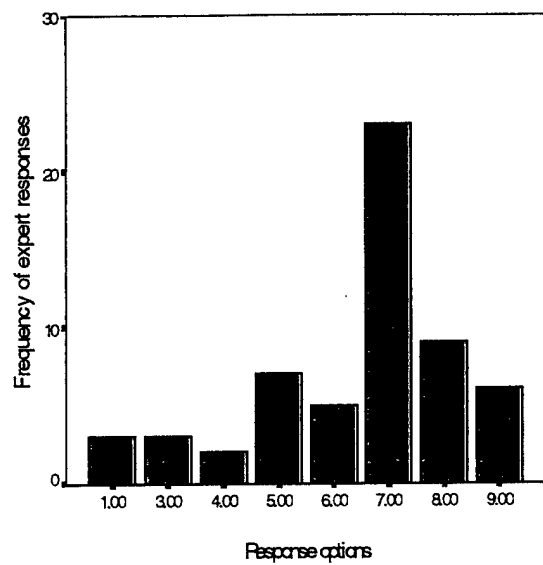
Mean	Median	Mode	St Dev
6.41	7	7	1.96

APPENDIX F: SAMPLE RESPONSE PROFILES FOR LEADERS RATED HIGH AND
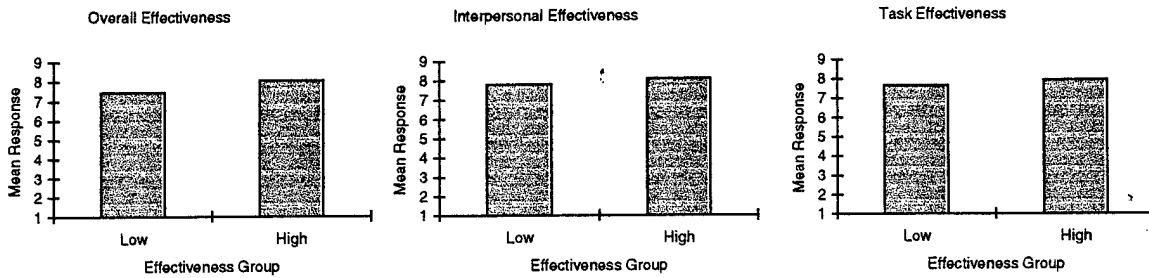LOW ON EFFECTIVENESS AT THE PLATOON, COMPANY, AND BATTALION
LEVELS

The following provides examples of incumbent officers' responses
to tacit knowledge questions. These questions correspond to
those provided in Appendix E. For each response option within a
tacit knowledge question, information about incumbents' ratings
is provided by dimension of leadership (overall, interpersonal,
task) and by rater perspectives (subordinate, peer, superior).
The data compares the responses of leaders who were rated high on
effectiveness with those who were rated low on effectiveness.

As an example, consider the responses of platoon leader to the
option "Do not change procedures that work. " An examination of
the mean responses for those rated high and low on effectiveness
by their peers and superior do not appear very different. This
means that rating this as a good option did not distinguish those
who were more effective from those who were less effective
leaders. Consider the data for another option, "Announce right
up front that you are in charge and the soldiers must accept this
fact and treat you with appropriate respect. " In this case, the
mean responses of those rated high and low on effectiveness by
their peers are fairly equal, but their are noticeable
differences between these two groups from the perspective of
their superior. Officers who were seen as more effective by
their superiors were more likely to rate this as a bad option
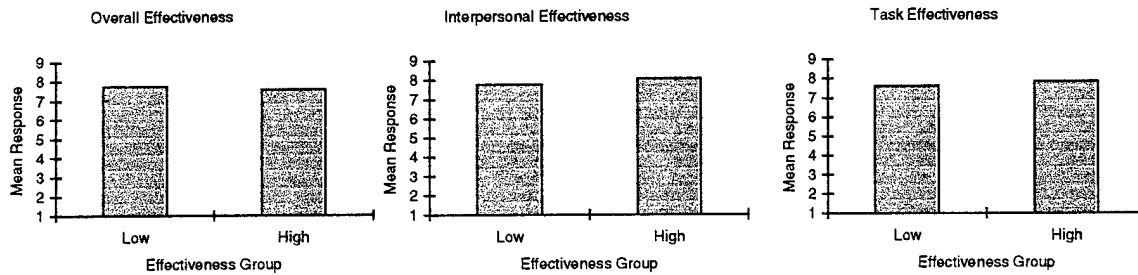than those who were seen as less effective.

<u>Platoon</u>

P8. _____ Do not change procedures that work.

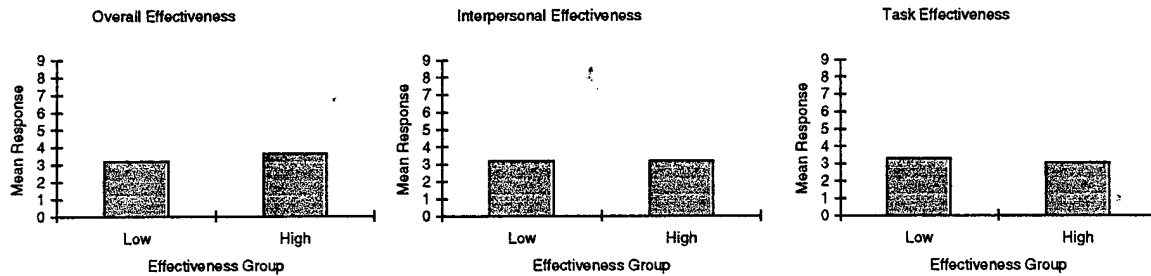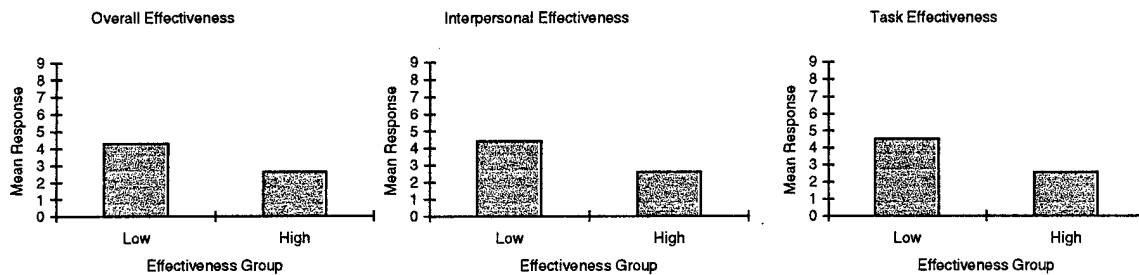## Mean Responses of those Rated High vs Low by their Peers

Overall Effectiveness

Interpersonal Effectiveness

Task Effectiveness

Mean Responses of those Rated High vs Low by their Superior

Overall Effectiveness

Interpersonal Effectiveness

Task Effectiveness

Platoon

P8. _____ Announce right up front that you are in charge and the soldiers must accept this fact and treat you with appropriate respect.

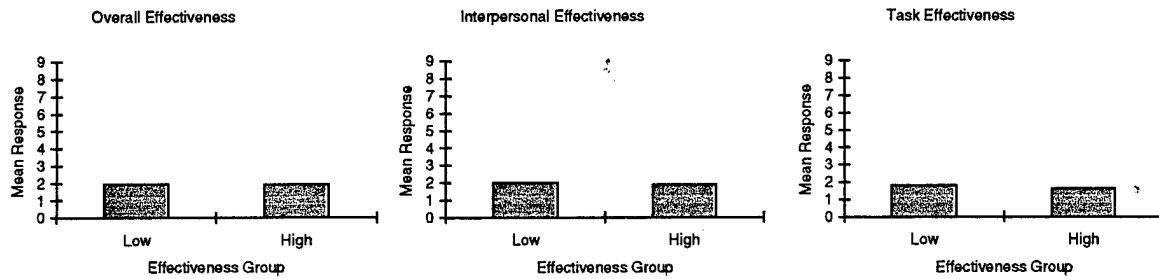### Mean Responses of those Rated High vs Low by their Peers

Overall Effectiveness | Interpersonal Effectiveness | Task Effectiveness

Mean Responses of those Rated High vs Low by their Superior

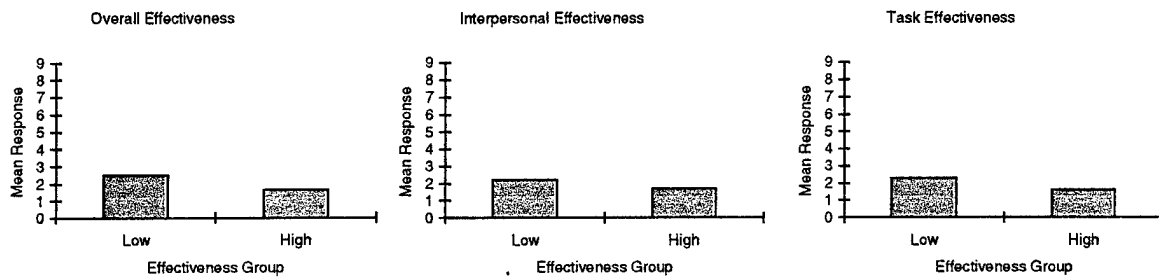Overall Effectiveness | Interpersonal Effectiveness | Task Effectiveness

C15. _____ Wait awhile to see if the situation improves on its own.

Mean Responses of those Rated High vs Low by their Subordinates

Overall Effectiveness | Interpersonal Effectiveness | Task Effectiveness

Mean Responses of those Rated High vs Low by their Peers

Overall Effectiveness | Interpersonal Effectiveness | Task Effectiveness

Mean Responses of those Rated High vs Low by their Superior

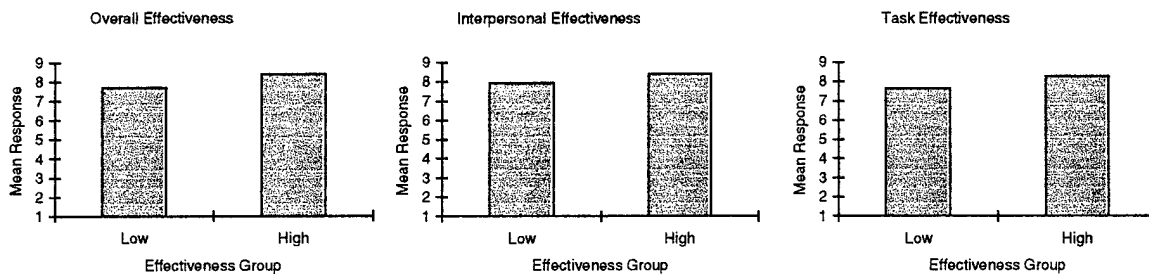Overall Effectiveness | Interpersonal Effectiveness | Task Effectiveness
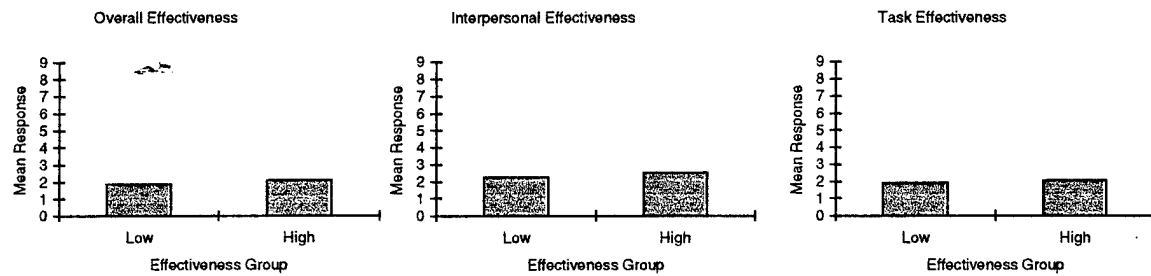
C15. _____ If an instance of insubordinate behavior occurs between the two of you in private, immediately reprimand the platoon leader.
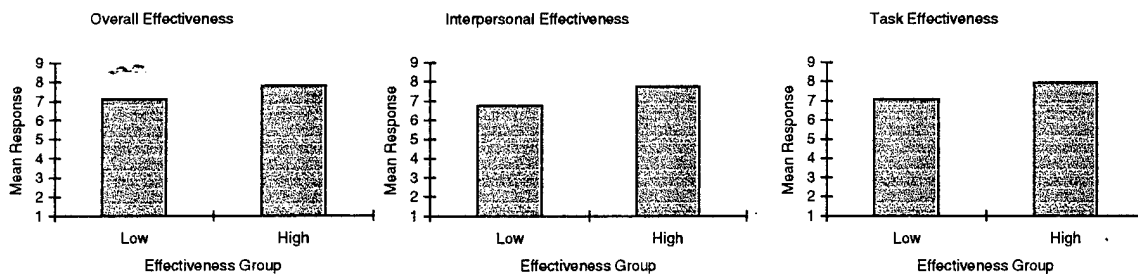
Mean Responses of those Rated High vs Low by their Subordinates
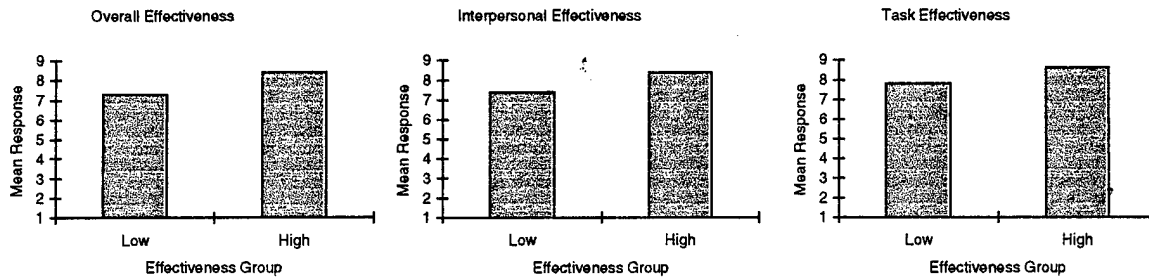
Overall Effectiveness

Interpersonal Effectiveness

Task Effectiveness

Mean Responses of those Rated High vs Low by their Peers

Overall Effectiveness

Interpersonal Effectiveness

Task Effectiveness

Mean Responses of those Rated High vs Low by their Superior

Overall Effectiveness

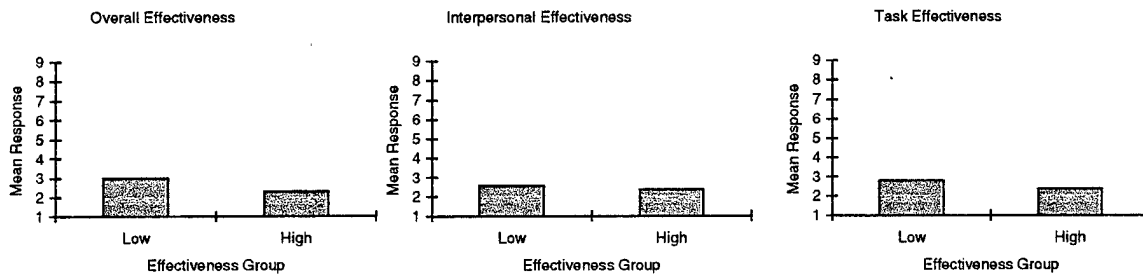Interpersonal Effectiveness

Task Effectiveness

<u>Battalion</u>

B3. _____ Leave the After Action Review and return to your units; once there,
communicate exactly what the Evaluator said.

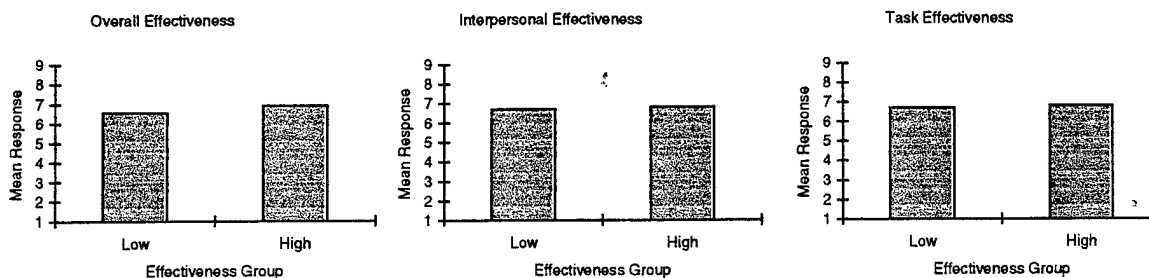### Mean Responses of those Rated High vs Low by their Subordinates

Overall Effectiveness	Interpersonal Effectiveness	Task Effectiveness

Mean Responses of those Rated High vs Low by their Superior

Overall Effectiveness	Interpersonal Effectiveness	Task Effectiveness
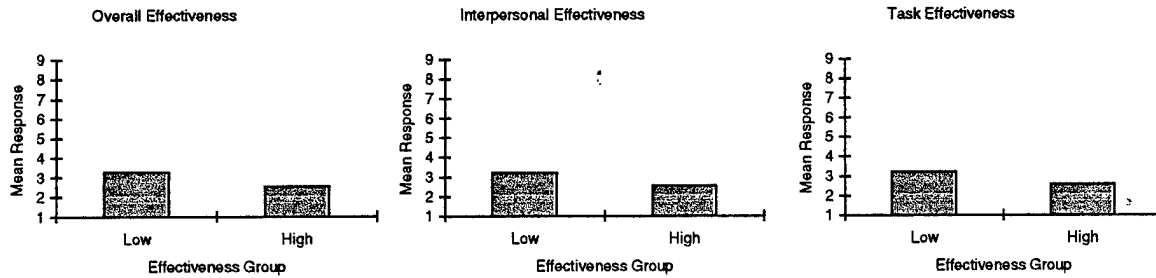
Battalion

B3. _____ If you have a good relationship with your CSM or other similar person, discuss your frustrations and feelings with him or her.

Mean Responses of those Rated High vs Low by their Subordinates

Overall Effectiveness	Interpersonal Effectiveness	Task Effectiveness

Mean Responses of those Rated High vs Low by their Superior

Overall Effectiveness	Interpersonal Effectiveness	Task Effectiveness